Permit Number: P0115099
Facility Name: Heritage Thermal Services
Facility ID: 0215020233
Working Copy of a Permit in Progress

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) B.5

2. The permittee shall comply with the requirements contained within the most recent version of the following regulations that are applicable to the facility:

   a) 40 CFR 61, Subpart J - National Emissions Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene);

   b) 40 CFR 61, Subpart V - National Emissions Standard for Equipment Leaks (Fugitive Emission Sources);

   c) 40 CFR 61, Subpart 61, Subpart FF - National Emissions Standard for Benzene Waste Operations;

   d) 40 CFR 63, Subpart DD - National Emissions Standard for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations;

   e) 40 CFR Part 68 (Chemical Accident Prevention Provisions); and

   f) 40 CFR Part 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, Or Modification Commences After July 23, 1984.

3. The permittee shall comply with the following applicable paragraphs of OAC rule 3745-21-09 when facility operations warrant applicability:

   a) Paragraph L - Storage of petroleum liquids in fixed roof tanks; and

   b) Paragraph DD - Leaks from process units that produce organic chemicals.

4. The following insignificant emissions units are located at this facility:

   B001 - Diesel driven generator, PTI 17-104;

   B002 - Fire pump #1, PTI 17-1009;

   B003 - Fire pump #2, PTI 17-1009;

   F003 - Slag & Fly Ash Transfer Systems, PTI 02-18743;

   P002 - External Truck Wash, PTI 17-104;

   T004 - South direct (to N001) tanker unloading bay, PTI 17-104;

   T008 - 7000-gallon Storage Tank 9 (1101), PTI 17-104;

   T009 - 2500-gallon Pump Out Tank 4, (1102), PTI 17-104;

   T012 - 7000-gallon Storage Tank 8 (1105), PTI 17-104;

   T018 - 20,000-gallon Storage Tank 7 (1201), PTI 17-104;

T019 - 20,000-gallon Storage Tank 6 (1202), PTI 17-104;

T022 - 20,000-gallon Storage Tank 17 (1205), PTI 17-104;

T023 - 20,000-gallon Storage Tank 16 (1206), PTI 17-104;

T024 - 20,000-gallon Storage Tank 15 (1207), PTI 17-104;

T027 - 20,000-gallon Storage Tank 14 (1210), PTI 17-104;

T028 - 20,000-gallon Storage Tank 11 (1211), PTI 17-104;

T029 - 20,000-gallon Storage Tank 10 (1212), PTI 17-104;

T032 - 20,000-gallon Storage Tank 13 (1215), PTI 17-104;

T033 - 20,000-gallon Storage Tank 12 (1216), PTI 17-104;

T036 - 2500-gallon Pump Out Tank 1 (1231), PTI 17-104;

T037 - 2500-gallon Pump Out Tank 2 (1232), PTI 17-104;

T038 - 2500-gallon Pump Out Tank 3 (1233), PTI 02-16110;

T042 - 20,000-gallon Storage Tank 5 (1301), PTI 17-104;

T043 - 10,000-gallon Storage Tank 2 (1302), PTI 17-104;

T044 - 20,000-gallon Storage Tank 4 (1303), PTI 17-104;

T045 - 700-gallon Pump Out Tank 6 (1304), PTI 17-104;

T048 - 20,000-gallon Storage Tank 1 (1220), PTI 17-104;

T053 - 2000-gallon Storage Tank 18 (1380), PTI 17-104;

T060 - 2000-gallon Storage Tank 3 (1385), PTI 17-104; and

T062 - 300-gallon Pump Out Tank 5 (00F11), PTI 17-104.

Each insignificant emissions unit at this facility must comply with all State and Federal regulations, as well as any emission limitations and/or control requirements contained with the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21.

5. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "DeMinimis" criteria established in OAC rule 3745-15-05:

Z001 - Leaking/Non-leaking equipment, pumps, valves, flanges;

Z002 - Truck hold and sample bays;

Z003 - 1000-gallon Laboratory tank;

Z004 - Storm Water Tank W1;

Z005 - Storm Water Tank W2;

Z006 - Storm Water Tank W3;

Z007 - Storm Water Tank W4;

Z008 - Storm Water Tank W5; and

Z009 - Analytical Laboratory.

C. Emissions Unit Terms and Conditions

6. B006, GAS FIRED AUXILLARY BOILER

Operations, Property and/or Equipment Description:

Gas-fired, Zurn Model 6M, 30.26 million Btu/hour, auxillary boiler. The auxiliary boiler is rated at 30.26 MMBtu/hour and is utilized only when the incinerator (N001) is offline or does not provide adequate freeze protection. The boiler burns only natural gas.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-18743, modification issued 10/9/07)	Nitrogen oxide (NO_X) emissions shall not exceed 3.09 lbs/hr and 13.52 tons/year. Carbon monoxide (CO) emissions shall not exceed 2.59 lbs/hr and 11.36 tons/year.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-10	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input and 0.61 lb/hr.
d.	40 CFR, Part 60, Subpart Dc	See section b)(2)a.
e.	40 CFR, Part 63, Subpart DDDDD (40 CFR 63.7480-63.7575)	See b)(2)c., d)(3) and e)(2)

(2) Additional Terms and Conditions

a. So long as only natural gas fuel is burned, this emissions unit is not subject to the emission limitations listed in 40 CFR Part 60, Subpart Dc.

b. Because this emissions unit is fired only with natural gas, there is no applicable emission limitation from OAC Chapter 3745-18.

c. This emissions unit meets the definition of an existing boiler or process heater with a heat capacity of greater than 10 mmBtu per hour; therefore, the following requirements found in 40 CFR, Part 63, Subpart DDDDD are applicable:

Work Practice Standards	63.7500(a)(3), (f) and Table 3
General Compliance Requirements	63.7505(a), 63.7515(d), 63.7540(a)(10) and (a)(13), 63.7565 and Table 10

(Authority for term: 40 CFR, Part 63, Subpart DDDDD)

c) Operational Restrictions

(1) The permittee shall burn only natural gas as fuel in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain a record of the dates and times that the auxiliary boiler was in use or tested, and the total hours of operation per year.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(2) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(3) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR, Part 63, Subpart DDDDD, including the following sections:

Record Keeping Requirements	63.7530(e), (f), 63.7555(a),(i), (j) 63.7560(a), (b) and (c)

(Authority for term: 40 CFR, Part 63, Subpart DDDDD and OAC rule 3745-77-07(C)(1))

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify the burning of any fuel other than natural gas in this emissions unit. Any such deviations shall be reported to the Ohio EPA Northeast District Office within 30 days of the permittee becoming aware of them.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(2) The permittee shall comply with the applicable monitoring, record keeping, and reporting requirements under 40 CFR, Part 63, Subpart DDDDD, including the following sections:

Reporting Requirements	63.7530(e), (f), 63.7545(a), (f), (h), 63.7550(a), (b), (c) and (h)

(Authority for term: 40 CFR, Part 63, Subpart DDDDD and OAC rule 3745-77-07(C)(1))

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: Nitrogen oxide (NO_X) emissions shall not exceed 3.09 lbs/hr and 13.52 tons/yr.

Applicable Compliance Method: Compliance may be determined by the following equation:

E = (R x EF x H) / 1,000,000

where:

E = Emissions in lbs/hr

R = Rating capacity of auxiliary boiler, reported as 30.26 mmBtu/hr

EF = Emission factor for NO_X is 100 lbs/mmft^3, taken from AP-42 (7/98), Section 1.4, Table 1.4-1.

H = Heat content of natural gas, in ft^3/mmBtu

If required, the hourly NO_X emission rate shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

The annual emission limit shall be determined by multiplying the hourly emission rate, in lbs per hour, by the number of hours of operation per year, as recorded in section d)(1) of these terms and conditions, and ton/2,000 lbs.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. Emission Limitation: Carbon monoxide (CO) emissions shall not exceed 2.59 lbs/hr and 11.36 tons/yr.

Applicable Compliance Method: Compliance may be determined by the following equation:

E = (R x EF x H) / 1,000,000

where:

E = Emissions in lbs/hr

R = Rating capacity of auxiliary boiler, reported as 30.26 mmBtu/hr

EF = Emission factor for CO is 84 lbs/mmft^3, taken from AP-42 (7/98), Section 1.4, Table 1.4-1.

H = Heat content of natural gas, in ft^3/mmBtu

If required, the hourly CO emission rate shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

The annual emission limit shall be determined by multiplying the hourly emission rate, in lbs/hr, by the number of hours of operation per year, as recorded in section d)(1) of these terms and conditions, and ton/2,000 lbs.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

c. Emission Limitation: Particulate emissions shall not exceed 0.020 lb/mmBtu, and 0.61 lb/hr.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 5.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

d. Emission Limitation: Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method: If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

g) Miscellaneous Requirements

(1) None.

7. F001, PAVED AND UNPAVED ROADWAYS AND PARKING AREAS

Operations, Property and/or Equipment Description:

Paved and unpaved roadways and parking areas; 1.25 tpy fugitive particulates with control. Up to 12,321.88 miles traveled on paved roadway; Up to 193.03 miles traveled on unpaved roadway.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F) (PTI 02-18743, modification issued 10/9/07)	See section b)(2)a.
b.	OAC rule 3745-17-07(B)(4)	There shall be no visible particulate emissions from the paved roadways and parking areas except for a period of time not to exceed 6 minutes during any 60-minute period.
c.	OAC rule 3745-17-07(B)(5)	There shall be no visible particulate emissions from the unpaved roadways and parking areas except for a period of time not to exceed 13 minutes during any 60-minute period.
d.	OAC rule 3745-17-08(B)	The permittee shall utilize reasonable available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections b)(2)b. through b)(2)e.

(2) Additional Terms and Conditions

a. The permittee has agreed to the following voluntary restriction for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. To adequately vacuum sweep the paved roadway and parking area at a

sufficient frequency to ensure controlled potential particulate emissions are less than 10.0 tons per year.

b. The permittee shall employ reasonably available control measures on all paved and unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by vacuum sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures to ensure compliance.

c. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved and unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

d. The permittee shall promptly remove, in such a manner as to minimize or prevent re-suspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported

c) Operational Restrictions

(1) The permittee shall ensure that the calculated controlled, fugitive particulate emissions are kept less than 10 tons per year. At the time of this permit issuance, the paved and unpaved roadways and parking areas emit a controlled fugitive particulate emission of 3.29 tons per year using a maximum of 12,321.88 miles traveled on the paved roadway and a maximum of 193.03 miles traveled on the unpaved roadway.

(Authority for term: OAC rule 3845-77-07(A)(1) and PTI 02-18743)

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform inspections of each paved and unpaved roadway segment and paved and unpaved parking area daily for one calendar quarter. If no visible emissions are noted for each daily inspection during that calendar quarter, then the frequency may become weekly for each paved roadway segment and paved parking area. If visible emissions are noted during a weekly inspection, the permittee shall revert

to daily inspections and perform daily inspections until no visible emissions are documented for an entire calendar quarter, at which time the permittee may again perform inspections on a weekly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(3) The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in section d)(3)d shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(4) The permittee shall maintain an annual record of the estimated total number of vehicle miles traveled on the paved roadways and parking areas, and also on the unpaved roadways and parking areas.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The written reports shall be submitted quarterly to the Ohio EPA Northeast District Office, i.e., by January 31, April 30, July 31 and October 31 of each year and shall cover the

previous calendar quarters.

If no deviation occurred during a calendar quarter, the permittee shall submit a quarterly report which states that no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: There shall be no visible particulate emissions from the paved roadways and parking areas except for a period of time not to exceed 6 minutes during any 60-minute period.

Applicable Compliance Method: If required, compliance with the visible emission limitation for the paved roadways and paved parking areas shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. Emissions Limitation: There shall be no visible particulate emissions from the unpaved roadways and parking areas except for a period of time not to exceed 13 minutes during any 60-minute period.

Applicable Compliance Method: If required, compliance with the visible emission limitation for the unpaved roadways and parking areas shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

g) Miscellaneous Requirements

(1) None.

8. F002, LOOSE SOLID WASTE RECEIVING AND HANDLING OPERATIONS

Operations, Property and/or Equipment Description:

Loose solid waste receiving and handling operations Pits 1 and 2 of the Feed Building. Emissions from the loose solid waste receiving and handling operations shall vent through a closed-vent system (vapor recovery system) to the incinerator (N001) and/or the carbon adsorption system.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-18743, modification issued 10/9/07. Administrative modification PTI # P0108374)	Controlled, organic compounds shall not exceed 82.55 lbs per hour and 361.57 tons per year. Fugitive, organic compounds shall not exceed 118.11 tons per year. See sections b)(2)a. through b)(2)m.
b.	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. See section b)(2)c.
c.	OAC rule 3745-17-08(B)	The permittee shall utilize reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections b)(2)c. and b)(2)f.
d.	40 CFR Part 61, Subpart FF	The requirements specified by this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See section b)(2)m.

e.	40 CFR Part 63, Subpart DD	The requirements specified by this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See section b)(2)m.

(2) Additional Terms and Conditions

a. The loose solid waste receiving and handling operations shall be contained in an enclosure meeting the criteria for a Permanent Total Enclosure specified in "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, Appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure.

b. The overhead doors to this emissions unit shall remain closed at all times when waste is contained within the enclosure except for the following events: 1) waste materials are being placed inside; 2) waste materials inside the enclosure need to be rearranged and the doors need to be open to allow for equipment maneuverability; 3) an emergency such as a fire necessitates the doors to be open for effective control; 4) needed maintenance activities cannot be performed unless the doors are open; and 5) needed brief visual assessment of pit capacity. At no time shall the doors be open when waste is actively being handled to be fed to the incinerator.

c. This emissions unit, as a permanent total enclosure, should not allow any fugitive emissions of any pollutant from exiting from the egress points when the overhead doors are closed. However, when the overhead doors are opened for the activities listed in section b)(2)b, any outward flow of air may contain fugitive organic compound and fugitive particulate emissions.

d. Emissions from the loose solid waste receiving and handling operations shall vent through a closed-vent system (vapor recovery system) to the incinerator (emissions unit N001) and/or to the carbon adsorption system.

e. The vapor recovery system shall be in operation when waste is contained within the enclosure. The incinerator and/or the carbon adsorption system, as control devices, shall also be in operation when waste is contained and processed within the enclosure.

f. The vapor recovery system upstream from the ventilation header blower shall be operated at a pressure below atmospheric pressure so that there is adequate suction, or inward flow, into the vapor recovery system. The draft shall have sufficient volume and velocity to minimize or eliminate fugitive dust escaping the building when the overhead doors need to be opened.

g. The incinerator, as a control device for this emissions unit, shall achieve a destruction efficiency of 99.99% for organic compounds.

h. The carbon adsorption system shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

i. The carbon adsorption system shall consist of two or more trains of a primary and a secondary carbon box operated in series. The trains shall be arranged in parallel. All boxes shall be the same size and have a maximum design flow rate of no less than 10,000 cfm. The carbon adsorption system shall be installed, operated and maintained in accordance with the "Von Roll's Routine Maintenance Procedure for Vapor Recovery Management" initially dated October 27, 2006, also referred to as the "Routine Maintenance Procedure") and any updated, approved plan thereafter.

j. The existing carbon within the carbon adsorption system shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. Carbon breakthrough will be determined by a reading of 50 ppm as a 60-minute rolling average from the Total Hydrocarbon (THC) Continuous Emissions Monitor (CEM) located between the first and second carbon bed in each train. This CEM shall be referred to as an Inter-Box CEM. The permittee is permitted to replace the carbon more frequently, i.e., before breakthrough is indicated, if the permittee determines that the carbon within any box is not effectively adsorbing volatile organic compounds, including benzene.

k. The vapor recovery system, or closed-vent system, shall comply with the following requirements:

   i. Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).

   ii. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

   iii. One or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

l. The permittee shall control equipment leaks from each equipment component of this emissions unit in accordance with sections 61.242 through 61.247 in 40 CFR Part 61, Subpart V - National Emission Standards for Equipment Leaks.

m. When this emissions unit is subject to the requirements of 40 CFR 61, Subpart FF (National Emissions Standards for Benzene Waste Operation), the permittee is exempt from Section 63.685 (standards for tanks) of 40 CFR 63, Subpart DD. Because benzene may be present in the waste handled by this emissions unit at any given time, the requirements contained in both 40 CFR 61, Subpart FF and 40 CFR 63, Subpart DD serve as a basis for determining the Best Available Technology established pursuant to OAC rule 3745-31-05(A)(3).

n. Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous THC monitoring system, designed to ensure continuous valid and representative readings of THC emissions in units of parts per million. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous THC monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units parts per million, in accordance with and at the frequencies required per 40 CFR Part 60.

c) Operational Restrictions

(1) The permittee shall operate a sufficient number of trains in the carbon adsorption system to ensure that the flow rate through each primary carbon box does not exceed the manufacturer's recommended maximum design air flow rate.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(2) When breakthrough within a train of the carbon adsorption system occurs, the permittee shall discontinue the use of that train as soon as possible but not longer than 12 hours after detection of breakthrough. The change-out must be completed within 48 hours after the use of the train that has been discontinued. The change-out will be performed such that the secondary carbon box becomes the primary box and a new carbon box is installed as the secondary box.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(3) If an Inter-Box CEMS reading is equal to or greater than 50 ppm on a 60-minute rolling average within 15 days after a change-out, the permittee is not required to initiate and complete a new change-out of the primary box pursuant to the Routine Maintenance Procedure. Instead, as expeditiously as possible, the permittee shall initiate and complete an investigation of the cause of the elevated Inter-Box CEMS reading to determine if the carbon within the primary box actually is spent or otherwise not functional. If the permittee determines the carbon within the primary box is spent or otherwise not functional, the permittee shall immediately initiate and complete a change-out of the primary box pursuant to the Routine Maintenance Procedure. If the permittee determines that the elevated Inter-Box CEMS reading is not caused by spent or non-functional carbon, the permittee shall implement corrective actions, if any to eliminate the cause(s) of the elevated readings. If within 5 days after the elevated Inter-Box CEMS reading, the permittee cannot determine the cause of the elevated reading, the permittee immediately shall initiate and complete a change-out of the primary box pursuant to the Routine Maintenance Procedure.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(4) The permittee shall maintain on-site a sufficient supply of fresh carbon or a spare carbon box containing fresh carbon to enable a change-out procedure to be performed in a timely manner.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform the verification procedure for the enclosure as specified in section 5.0 of Procedure T annually.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(2) The permittee shall perform daily inspections of the enclosure of this emissions unit and of the overhead doors, to ensure that they are in good operating condition. The permittee shall look for cracks, openings, broken seals or any other condition that would allow outward flow from the emissions unit. If outward flow is discovered, corrective action shall be performed as soon as possible. The permittee shall record inspection findings and corrective action taken in a log.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(3) The permittee shall record the date and duration, in minutes, of each event when the overhead doors are open.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(4) Each time the overhead doors need to be opened, the permittee shall perform a check for any visible particulate emissions. The presence or absence of any visible fugitive emissions and the date shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period. With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal emissions.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(5) The permittee shall install, calibrate, operate and maintain equipment to continuously monitor and record total hydrocarbons (THC), in units of parts per million, between the first and second carbon bed of each train of the carbon adsorption system (Inter-Box CEMS) for the purpose of determining breakthrough. A THC monitor and recorder shall

also be on the exhaust vent stream.

a. A statement of approval of the continuous THC monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the performance specifications tests and a statement by the Agency that the system is considered approved for use in accordance with the requirements of 40 CFR Part 60, Appendix B, performance Specification 8A - Specifications and Test Procedures for Total Hydrocarbon Continuous Monitoring Systems in Stationary Sources. Proof of approval shall be made available to the Director (Ohio EPA Northeast District Ohio) upon request.

b. Each continuous monitoring system consists of all the equipment used to acquire and record data in parts per million, and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

c. The permittee shall operate and maintain equipment to continuously monitor and record THC emissions in units of parts per million. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

d. The permittee shall maintain records of data obtained by the continuous THC monitoring system including, but not limited to:

   i. emissions of THCs in parts per million on an instantaneous (one-minute) basis;

   ii. emissions of THCs in parts per million on a 60-minute rolling average;

   iii. results of quarterly cylinder gas audits;

   iv. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

   v. results of required relative accuracy test audits (or PS 8A alternative);

   vi. hours of operation of the emissions unit, continuous THC monitoring system, and carbon adsorption system;

   vii. the date, time, and hours of operation of the emissions unit without the carbon adsorption system and/or the continuous THC monitoring system;

   viii. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous THC monitoring system; and,

   ix. the reason (if known) and the corrective actions taken (if any) for each such event in (d.vii) and (d.viii). These records shall be kept at the facility no less than 3 years and be available for inspection upon request by the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(6) With respect to each Inter-Box CEMS, the permittee shall comply with Performance Specification 8A, except that the permittee shall:

a. to the extent that the permittee utilizes two ducts between each primary and each secondary box for pressure control purposes, be permitted to utilize a sample location on only one of the two ducts;

b. keep the sample probe heated to approximately the same temperature as, or slightly higher than, the temperature inside the duct in which it is inserted;

c. establish a span value of 200 ppm propane; and

d. utilize the following three test points for conducting calibration error tests:

i. Zero Level: zero to 0.1 ppm;

ii. Mid-Level: 40 to 60 ppm;

iii. High-Level: 140 to 160 ppm.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(7) On a continuous basis, the permittee shall direct the Inter-Box CEMS data to the facility's control system and shall maintain an alarm that will sound whenever breakthrough between a primary and a secondary carbon box occurs.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(8) During times when a train of the carbon adsorption system is not in use, the permittee shall record "no flow" instead of a THC concentration for the respective Inter-Box CEMS.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(9) The permittee shall maintain the following annual records:

a. the amount of waste processed within the emissions unit, in tons per year;

b. an approximate, average percent of organic material within the solid waste placed within the emissions unit;

c. the percent volatilization of the organic material with the highest vapor pressure that was processed within the emissions unit;

d. the organic compound emissions (OCE) from the waste, in tons per year, calculated by the following equation:

OCE = (Amount of waste processed, tons/yr) x (% organics in the waste, as a decimal) x (*maximum percent volatilization of organics in waste, as a decimal)

*If the actual, maximum percent volatilization of the organics in the waste cannot be ascertained, the permittee shall use 100% or 1.00.

e. the percent of time, as a decimal, of when the overhead doors were open during the year as calculated by the following equation:

% of time open, as a decimal = summation of minutes open, as recorded in section d)(3), divided by 525,600 minutes;

f. the percent of time, as a decimal, of when the overhead doors were closed during the year as calculated by the following equation:

% of time closed, as a decimal = 1 - (result of section d)(9)e)

g. a calculation of the fugitive organic compound emissions by use of the following equation:

E fugitive (tons OC/year) = (OCE) x (% open) x (0.10)

where:

E fugitive = tons of fugitive organic compounds per year;

OCE = organic compound emissions from the waste, in tons per year, as calculated in section d)(9)d;

% open = the percent of time, as a decimal, of when the overhead doors were open during the year as calculated and recorded in section d)(9)e; and

0.10 = 10% of emissions are assumed to be fugitive emissions when the overhead doors are open. 90% of emissions are assumed to be captured when the overhead doors are open.

h. a calculation of the captured emissions, calculated by the following equation:

Cap E = (OCE)(%open)(0.90) + (OCE)(%closed)(1.00)

where:

Cap E = tons organic compounds captured and vented through vapor recovery to the incinerator and/or carbon adsorption system;

OCE = organic compound emissions from the waste, in tons per year, as calculated in section d)(9)d;

% open = the percent of time, as a decimal, of when the overhead doors were open during the year as calculated and recorded in section d)(9)e;

% closed = the percent of time, as a decimal, of when the overhead doors where closed during the year as calculated and recorded in section d)(9)f;

0.90 = when the doors are open, 90% of the emissions are assumed to be captured; and

1.00 = when the doors are closed, 100% of the emissions are assumed to be captured.

i. calculation of the controlled organic compounds emissions, as calculated by the following equation:

E (tons OC/year) = [(Cap E x I) x (1 - 0.9999)] + [(Cap E x C) x (1 - 0.95)]

where:

E = tons of controlled organic compounds per year;

Cap E = tons of captured organic compound emissions as calculated and recorded in section d)(9)h;

I = Approximate percent of emissions, as a decimal, within the vapor recovery system that were vented to the incinerator; and

C = Approximate percent of emissions, as a decimal, within the vapor recovery system that were vented to the carbon adsorption system.

I + C must equal 100% or 1.00. Typical operation at the time of permit issuance is 85-90% of emissions to the incinerator and 10-15% of emissions to the carbon adsorption system. The annual OC limit of 361.57 tons/year was calculated using worst case scenario of I=0 and C=1.00.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(10) The permittee shall perform quarterly, visual inspections of the vapor recovery system and control devices (incinerator and carbon adsorption system). The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connection.

If visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the vapor recovery system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed. Exception for delay of repair would be allowed per 40 CFR 61.350.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(11) The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the organic compound emissions from the exhaust vent stream from the carbon adsorption system. This record shall be reviewed at least once per day.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(12) The permittee shall maintain, and retain for the life of each control device, the following records:

a. a statement signed and dated by the permittee certifying that the vapor recovery system and control device (incinerator and carbon adsorption system) are designed to operate at the documented performance level when this emissions unit is operating at the highest load or capacity. The document will therefore include the following:

i. a statement certifying that the vapor recovery system is designed to operate with no detectable emissions as indicated by an instrument

reading of less than 500 ppmv above background, is designed so that all gauging and sampling devices be gas-tight except when gauging or sampling is taking place, and that any rupture discs remain closed during normal operation.

ii. a statement certifying that the incinerator can achieve a 99.99% destruction efficiency for organic compounds when this emissions unit is operating at its highest load or capacity; and

iii. a statement certifying that the carbon adsorption system can achieve a 95% control efficiency for organic compounds when this emissions unit is operating at its highest load or capacity.

b. the design analysis showing control device performance. The design analysis shall include specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering tests.

For the incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

For the carbon adsorption system, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(13) The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the vapor recovery system upstream from the ventilation header blower. This record shall be reviewed at least once per day.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(14) The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a device to continuously monitor the temperature in the combustion chamber of the incinerator, as a control device for this emissions unit. The temperature monitoring device shall have an accuracy of plus or minus 1 percent of the temperature being monitored in degree Celsius, or plus or minus 0.5 degree Celsius, whichever is greater. This record shall be reviewed according to the terms and conditions for emissions unit N001.

(Authority for term: OAC rule 3745-77-07 (C)(1) and PTI 02-18743)

(15) The permittee shall maintain records that contain the following information:

a. a record of any time when the vapor recovery system was not in operation when waste was contained and/or processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;

b. any time when emissions in the vapor recovery system were not vented to either the incinerator and/or the carbon adsorption system when waste was contained and/or processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;

c. any record indicating that the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action, if any; and

d. any record indicating detectable emissions from the vapor recovery system and/or any equipment component of this emissions unit. This record may be included in the monthly Leak Detection and Repair Program report.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. any time when the vapor recovery system was not in operation when waste was processed within this emissions unit;

b. any time when emissions in the vapor recovery system were not vented to either the incinerator and/or the carbon adsorption system when waste was processed within this emissions unit;

c. any record indicating the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit;

d. any record indicating detectable emissions from the vapor recovery system and/or any equipment component of this emissions unit;

e. an identification of the days when cracks, openings, broken seals or any other condition allowing outward flow from the emissions unit were discovered by the daily inspection of the overhead doors and/or enclosure and a description of the corrective action, and when it was performed, would be included in the report; and

f. an identification of the days during which any visible emissions of fugitive dust were observed when the overhead doors were opened and a description of any corrective actions taken, if any, to minimize or eliminate the visible emissions.

The written reports shall be submitted quarterly to the Ohio EPA Northeast District Office, i.e., by January 31, April 30, July 31 and October 31 of each year and shall cover the

previous calendar quarters.

If no deviation occurred during a calendar quarter, the permittee shall submit a quarterly report which states that no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: Controlled organic compounds shall not exceed 82.55 lbs per hour.

Applicable Compliance Method: Compliance shall be determined by the record keeping and calculation in section d). The lb/hr limit shall be calculated by multiplying the annual controlled organic compound emissions by 2,000 lbs-yr/8,760 hrs-ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. Emission Limitation: Controlled organic compounds shall not exceed 361.57 tons per year.

Applicable Compliance Method: Compliance shall be determined by the record keeping and calculation in section d).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

c. Emission Limitation: Fugitive organic compounds shall not exceed 118.11 tons per year.

Applicable Compliance Method: Compliance shall be determined by the record keeping and calculation in section d).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

d. Emission Limitation: Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

g) Miscellaneous Requirements

(1) None.

9. F004, PNEUMATIC LIME & ACTIVATED CHARCOAL HANLDING SYSTEM

Operations, Property and/or Equipment Description:

Bulk lime is pneumatically transferred to the storage silo. The pneumatic system shall be adequately enclosed so as to minimize visible emissions of fugitive dust. The bulk lime silo is vented to a fabric filter baghouse sufficient to minimize visible emissions of fugitive dust. Charcoal is transferred to the ECIS system via a closed system to minimize visible emissions of fugitive dust.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-18743, modification issued 10/9/07)	0.32 pound particulate per hour and 1.4 tons particulate per year from the lime silo stack The visible particulate emissions from the lime silo stack shall not exceed 5% opacity as a 6-minute average. Visible emissions of fugitive dust shall not exceed 5% opacity as a 3-minute average. See section b)(2)a.
b.	OAC rule 3745-17-07(A)	The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(B)	The visible emissions of fugitive dust limitation specified by this rule is less stringent than the visible emissions of fugitive dust limitation established pursuant to OAC rule 3745-31-

		05(A)(3).
d.	OAC rule 3745-17-08(B)	The permittee shall utilize reasonable available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See section b)(2)b.
e.	OAC rule 3745-17-11	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The fabric filter achieving an outlet grain loading rate of 0.030 grain per dry standard cubic foot shall be in operation on the lime silo stack while this emissions unit is in operation.

b. The permittee shall maintain the following control measures:

i. The bulk lime shall be pneumatically transferred to the storage silo. The pneumatic system shall be adequately enclosed so as to minimize visible emissions of fugitive dust.

ii. The bulk lime storage silo shall be vented to the fabric filter. The enclosure shall be sufficient to minimize visible emissions of fugitive dust.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate and maintain equipment to monitor the pressure drop in inches of water across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall record the pressure drop in inches of water across the baghouse on a weekly basis.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications. The permittee has reported this range to be 0.5 to 8.0 inches of water.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(2) The permittee shall perform daily inspections of the pneumatic lime and activated charcoal handling system to ensure that all enclosures are in good operating condition.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the lime silo stack and for any fugitive visible emissions from the egress points for one calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

If no visible emissions are noted for each daily inspection during that calendar quarter, then the frequency may become weekly. If visible emissions are noted during a weekly inspection, the permittee shall revert to daily inspections and perform daily inspections until no visible emissions are documented for an entire calendar quarter, at which time the permittee may again perform inspections on a weekly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(4) The permittee shall record the amount of lime and charcoal (carbon), in tons, handled each year. The permittee shall also calculate the fugitive particulate emissions from this emissions unit by using the following equation:

E = (EF x N1 x W1) x (1 ton/2,000 lbs) + (EF x N2 x W2) x (1 ton/2,000 lbs)

where:

E = emissions in tons particulate per year;

EF = emission factor of 0.003 lb PE/ton, taken from AP-42 11.19.2-2 - Crushed stone processing operations - conveyor transfer points (8/04);

N1 = number of transfer points for lime handling is 7;

W1 = amount of lime, in tons, processed each year as recorded in section A.III.4;

N2 = number of transfer points for charcoal (carbon) is 13; and

W2 = amount of charcoal (carbon), in tons, processed each year as recorded in section d)(4).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. the period of time when the pressure drop across the baghouse on the lime silo stack was outside the range specified in section d)(1);

b. any day during which the enclosures were not maintained in good operating condition and the corrective actions taken; and

c. each day or week during which any visible emissions were observed and the corrective actions taken.

The written reports shall be submitted quarterly to the Ohio EPA Northeast District Office, i.e., by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters.

If no deviation occurred during a calendar quarter, the permittee shall submit a quarterly report which states that no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: Visible particulate emissions from the lime silo stack shall not exceed 5% opacity as a 6-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. Emission Limitation: Visible emissions of fugitive dust shall not exceed 5% opacity as a 3-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

c. Emission Limitation: Particulate emissions from the lime silo stack shall not exceed 0.32 lb/hour.

Applicable Compliance Method: If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

d. Emission Limitation: Particulate emissions from the lime silo stack shall not exceed 1.4 ton/year.

Applicable Compliance Method: Compliance shall be determined by multiplying the hourly rate, in lbs/hr, by (8,760 hrs/yr)(ton/2,000 lbs).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

g) Miscellaneous Requirements

(1) None.

10. N001, HAZARDOUS WASTE INCINERATOR

Operations, Property and/or Equipment Description:

Hazardous waste incinerator (97.8 mmBtu/hour), equipped with a spray dryer, an electrostatic precipitator and a scrubber

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-18743, modification issued 10/9/07. Administrative modification PTI # P0108374)	Sulfur dioxide emissions from the stack shall not exceed 11.34 pounds per hour and 49.69 tons per year. Nitrogen oxides emissions from the stack shall not exceed 28.36 pounds per hour and 124.23 tons per year. Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. There shall be no visible particulate emissions of fugitive dust. Compliance with OAC rule 3745-31-05(A)(3) includes compliance with 40 CFR Part 61, Subpart C, 40 CFR Part 63, Subpart EEE and OAC rule 3745-17-07(A). See sections b)(2)a. through b)(2)l.
b.	40 CFR Part 61, Subpart C (NESHAP for Beryllium)	Beryllium emissions shall not exceed 10 grams per 24 hour period.
c.	40 CFR Part 61, Subpart E (NESHAP for Mercury)	The emission limitation specified by this federal regulation is less stringent

		than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 61, Subpart FF (NESHAP for Benzene Waste Operations)	The requirements of this federal regulation are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).
e.	40 CFR Part 63, Subpart EEE	The requirements of this federal regulation are equivalent to the requirements established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-17-07(A)	The visible particulate emission limitation specified by this rule is equivalent to the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-17-07(B)	The visible particulate emission limitation for fugitive dust specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	OAC rule 3745-17-08(B)	The requirements specified by this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
i.	OAC rule 3745-17-09(B)	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
j.	OAC rule 3745-18-06(E)(2)	The sulfur dioxide emission limitation specified by this rule is less stringent than the sulfur dioxide emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. Dioxin and furan emissions from the stack shall not exceed of 0.20 ng toxicity equivalence (TEQ) per dry standard cubic meter (dscm) corrected to 7 percent oxygen or 0.40 ng TEQ/dscm corrected to 7 percent oxygen, provided that the combustion gas temperature at the inlet to the initial particulate matter control device is 400 degrees Fahrenheit (F) or lower based on the average of the test run average temperatures.

b. Mercury emissions from the stack shall not exceed of 130 ug/dscm corrected to 7 percent oxygen.

c. Combined emissions of lead and cadmium from the stack shall not exceed 240 ug/dscm corrected to 7 percent oxygen. No later than October 14, 2008, combined emissions of lead and cadmium from the stack shall not exceed 230 ug/dscm corrected to 7 percent oxygen.

d. Combined emissions of arsenic, beryllium, and chromium shall not exceed 97 ug/dscm corrected to 7 percent oxygen. No later than October 14, 2008, combined emissions of arsenic, beryllium, and chromium shall not exceed 92 ug/dscm corrected to 7 percent oxygen.

e. Beryllium emissions from the stack shall not exceed 10 grams per 24-hour period.

f. Carbon monoxide emissions from the stack shall not exceed 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen and 95.26 tons per year;

or

Hydrocarbons emissions from the stack shall not exceed 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, reported as propane, and 15.00 tons per year.

g. Combined hydrochloric acid and chlorine gas emissions from the stack shall not exceed 77 parts per million by volume, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen and 281.17 tons per year. No later than October 14, 2008, combined hydrochloric acid and chlorine gas emissions from the stack shall not exceed 32 parts per million by volume, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen and 116.85 tons per year.

h. Particulate emissions from the stack shall not exceed 34 mg/dscm corrected to 7 percent oxygen and 28.27 tons per year. No later than October 14, 2008, particulate emissions from the stack shall not exceed 0.013 grain/dscf corrected to 7 percent oxygen and 24.74 tons per year.

i. This emissions unit shall achieve a destruction and removal efficiency (DRE) of 99.99% for each selected principle organic hazardous constituent (POHC).

j. This emissions unit is not permitted to burn and shall not burn the following:

i. dioxin-listed hazardous wastes, including waste codes of F020, F021, F022, F023, F026, or F027; and

ii. any material containing asbestos.

k. Should 40 CFR Part 63, Subpart EEE be revised such that the emissions limitations change for the pollutants mentioned in sections b)(2)a through b)(2)i above, then the permittee shall comply with the most current, revised standard according to the requirements of the subpart.

l. The permittee shall operate within all Operating Parameter Limits (OPLs) and operating requirements established during the most recent Comprehensive Performance Test (CPT) and reported in the subsequent Notice of Compliance (NOC). However, at no time, shall the minimum secondary combustion chamber temperature be established to be less than 1,600 degrees Fahrenheit.

m. Per 40 CFR 63.1206(b)(1), the emission standards and operating requirements of 40 CFR Part 63, Subpart EEE apply at all times except during 1) periods of startup, shutdown and malfunction; and 2) when hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cut off for a period of time not less than the hazardous waste residence time) and the permittee has documented in the operating record compliance with all otherwise applicable requirements and standards promulgated under authority of section 112 or 129 of the Clean Air Act in lieu of the emission standards under 40 CFR Part 63, Subpart EEE.

c) Operational Restrictions

(1) The permittee shall comply with all applicable requirements contained in the most recent version of 40 CFR 63.1206.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(2) All emissions shall be vented to the control equipment (spray dryer, electrostatic precipitator, 4-stage wet scrubber and carbon injection system) associated with this

emissions unit. The permittee shall maintain the control equipment in accordance with the manufacturer's operating manuals, with any adjustments or modifications deemed necessary by the permittee, and as required by the standards promulgated in 40 CFR Part 63, Subpart EEE.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(3) The permittee must prepare and at all times operate according to an Operation and Maintenance Plan that describes in detail procedures for operation, inspection, maintenance, and corrective measures for all components of the combustor, including associated pollution control equipment, that could affect emissions of regulated hazardous air pollutants.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(4) The incinerator, including all associated equipment and grounds, shall be designed, operated and maintained to prevent the emissions of objectionable odors.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(5) The permittee shall control combustion system leaks by the following:

a. keeping the maximum combustion zone pressure lower than ambient pressure, which is maintained by the induced draft (ID) fan; and

b. pressurizing the inlet and outlet end shrouds to approximately 0.2 inch of water column (or any revised pressure measure acceptable to the Ohio EPA) which provides an alternative means of control of combustion system leaks that is equivalent to maintaining the maximum pressure in the combustion zone below

the ambient pressure. This control method is necessary for when the combustion of certain hazardous waste produces a positive pressure spike within the kiln and/or secondary combustion chamber.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(6) The permittee shall operate the hazardous waste combustor with a functioning automatic waste feed cutoff (AWFCO) system that immediately and automatically cuts off the hazardous waste feed to the kiln and which shall be activated and operated as required in 40 CFR 63.1206(c)(3), as follows:

a. when any Operating Parameter Limit (OPL) established during the most recent Comprehensive Performance Test (CPT) and reported in the subsequent Notice of Compliance (NOC) is exceeded;

b. when any emission standard monitored by a Continuous Emission Monitoring System (CEM) is exceeded;

c. the pressure in the secondary combustion chamber is greater than zero inches of water column for more than 10 seconds;

d. the pressure in the secondary combustion chamber is greater than the pressure in the inlet or outlet end shroud at any time;

e. the pressure in the secondary combustion chamber is greater than ambient pressure for more than 2 seconds during operating time when the pressurizing equipment for either shroud has failed;

f. when the span value of any Continuous Monitoring System, e.g., temperature monitoring devices, pressure transducers, flow meters, (except a CEM), is met or exceeded;

g. upon malfunction of a CMS that monitors an OPL established during the most recent CPT and reported in the subsequent NOC; or

h. when any component of the automatic waste feed cutoff system fails.

The AWFCO and associated alarms must be tested at least weekly to verify operability, unless the permittee documents in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate; in which case, the permittee shall conduct operability testing at least monthly.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(7) Start-up of the incinerator shall begin with the heating of the cold combustion zone with natural gas, distillate fuel oil, or waste materials which have been classified as hazardous solely due to their ignitability. Alternate fuels may not be used unless approved by the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(8) Waste material shall not be fed to the kiln until compliance with all OPLs, established during the most recent CPT and reported in the subsequent NOC, is achieved.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(9) The permittee shall comply with all state and federal laws and regulations including, but not limited to, the Toxic Substances Control Act of 1979. No polychlorinated biphenyls (PCB's) in excess of 50 ppm shall be incinerated unless the permittee obtains an Ohio EPA Permit-to-Install. No high-level or low-level radioactive wastes, herbicides, pesticides, rodenticides, insecticides, or other materials shall be incinerated in violation of state and federal laws and regulations.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(10) The permittee shall comply with all requirements contained in the most recent Ohio Hazardous Waste Facility Installation and Operation Permit and in all modifications.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(11) When the Emergency Diesel Generator (insignificant emissions unit B001) is in operation, feeding of waste materials to the incinerator shall be suspended.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(12) The Electrostatic Precipitator shall be operated under the conditions established during the most recent Comprehensive Performance Test (CPT) and reported in the subsequent Notice of Compliance (NOC). These parameters shall be regulated by an automatic voltage controller (AVC) such as a Digicon Optipulse Controller #PN0803 manufactured by Environmental Elements or an AVC of the same type and specifications.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with all applicable monitoring requirements contained in the most recent version of 40 CFR 63.1209.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(2) The permittee shall comply with all applicable record keeping requirements listed in the most recent version of 40 CFR 63.1211. These requirements include, but may not be limited to, the following rule citations:

a. 40 CFR 63.1200, 63.10(b) & (c)

General. Information required to documenting and maintaining compliance with the regulations of Subpart EEE, including data recorded by continuous monitoring systems, and copies of all notification, reports, plans, and other documents submitted to the Ohio EPA.

40 CFR 63.1206(b)(1)(ii)

If the permittee elects to comply with all applicable requirements and standards promulgated under authority of the Clean Air Act, including Sections 112 and 129, in lieu of the requirements of Subpart EEE when not burning hazardous waste, the permittee must document in the operating record compliance with those requirements.

40 CFR 63.1206(b)(5)(ii)

Documentation that a change will not adversely affect compliance with the emission standards or operating requirements

40 CFR 63.1206(b)(11)

Calculation of hazardous waste residence time

40 CFR 63.1206(c)(2)

Startup, shutdown, and malfunction plan

40 CFR 63.1206(c)(2)(v)(A)

Documentation of investigation and evaluation of excessive exceedances during malfunctions

40 CFR 63.1206(c)(3)(v)

Corrective measures for any automatic waste feed cutoff that results in an exceedance of an emission standard or operating parameter limit

40 CFR 63.1206(c)(3)(vii)

Documentation and results of the automatic waste feed cutoff operability testing

40 CFR 63.1206(c)(5)(ii)

Method used for control of combustion leaks

40 CFR 63.1206(c)(6)

Operator training and certification program

40 CFR 63.1206(c)(7)(i)(D)

Operation and maintenance plan

40 CFR 63.1209(c)(2)

Feedstream analysis plan

40 CFR 63.1209(k)(6)(iii)

Documentation that a substitute activated carbon will provide the same level of control as the original material

40 CFR 63.1209(q)

Documentation of changes in modes of operation

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(3) The permittee shall use either a carbon monoxide (CO) or hydrocarbon (THC) continuous emissions monitoring system (CEMS) to demonstrate and monitor compliance with the CO or THC standard. The permittee shall also use an oxygen CEMS to continuously correct the CO or THC level to 7 percent oxygen.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(4) The permittee shall also install, calibrate, operate and maintain equipment to continuously monitor and record opacity, sulfur dioxide, nitrogen oxide, and gas flow rate.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(5) The continuous emissions (or opacity) monitoring systems have the following requirements:

a. A statement of certification of each continuous emissions (or opacity) monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the applicable requirements of 40 CFR Part 60, Appendix A or B.

Appendix B: Performance Specification 4B for carbon monoxide and oxygen, Performance Specification 8A for hydrocarbons, Performance Specification 1 for opacity, Performance Specification 2 for sulfur dioxide and nitrogen oxide, and Performance Specification 6 for each "mass emission rate" monitoring system.

Proof of certification shall be made available to the Director (Ohio EPA Northeast District Office) upon request.

Each continuous emissions (or opacity) monitoring system consists of all the equipment used to acquire and record data in units of all applicable standards, and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. The permittee shall operate and maintain equipment to continuously monitor and record the pollutant emissions, in units applicable to the standards. Such continuous emissions (or opacity) monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

c. The permittee shall maintain records of all data obtained by each continuous emissions (or opacity) monitoring systems including, but not limited to:

i. emissions in units applicable to the standards on an instantaneous (one-minute basis);

ii. emissions for the appropriate averaging period (hourly or 6-minute block);

iii. results of quarterly cylinder gas audits;

iv. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

v. results of required relative accuracy test audits (or PS 8A alternative);

vi. hours of operation of the emissions unit and continuous emissions (or opacity) monitoring system;

vii. the date, time, and hours of operation of the emissions unit without the continuous emissions (or opacity) monitoring system;

viii. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous emissions (or opacity) monitoring system; and

ix. the reason (if known) and the corrective actions taken (if any) for each such event in (c.vii) and (c.viii).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(6) The permittee shall install, calibrate, operate and maintain other continuous monitoring systems (CMS), e.g., temperature monitoring devices, pressure transducers, flow meters, to document compliance with all applicable Operating Parameter Limits (OPL) established during the most recent Comprehensive Performance Test and reported in the subsequent Notice of Compliance.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(7) The permittee shall install, calibrate, operate and maintain equipment to monitor the operating parameter limits, pertaining to the control of combustion system leaks, as specified in paragraph 5 under the Operational Restrictions section of this permit.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(8) The permittee shall record all periods of time when compliance with any Operating Parameter Limit was not achieved.

(Authority for term: OAC rule 3745-77-70(C)(1) and PTI 02-1873)

(9) The permittee shall obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits for mercury, semi-volatile metals, low volatile metals, total chlorine (organic and inorganic) and chloride. The permittee shall develop and implement a feedstream analysis plan. The plan, at a minimum, shall specify the following:

a. the parameters for which each feedstream will be analyzed;

b. documentation as to whether the analysis for each waste stream shall be performed through sampling and analysis or from analytical information;

c. documentation as to how the analysis shall document compliance with the applicable feedrate limits;

d. the test methods used to obtain the analysis;

e. the sampling method used to obtain a representative sample of each feedstream analyzed;

f. the frequency with which the permittee shall review or repeat the analysis of the feedstream;

g. documentation for determining the mass or volume flowrate of each feedstream using a continuous monitoring system (if the flowrate of the feedstream is determined by volume, the density of the feedstream must also be determined and documented, unless the constituent concentration is in units of weight per unit volume); and

h. procedures for calculating and maintaining records of the mass feedrate of mercury, semivolatile metals, low volatile metals, total chlorine (organic and inorganic), and chloride, as the twelve-hour rolling average maximum theoretical emission concentration (MTEC).

The feedstream analysis plan shall be submitted to the Ohio EPA Northeast District Office upon request.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(10) The permittee shall calculate the hazardous waste residence time for each waste fed to the incinerator using the equation provided in the CPT test plan under 40 CFR 63.1207(f).

(Authority for term: OAC rule 3745-77-70(C)(1) and PTI 02-18743)

(11) The permittee shall develop a plan for the routine sampling and laboratory analysis of incoming wastes for the purpose of preventing polychlorinated biphenyls (PCBs), in excess of 50 ppm, from being incinerated in the kiln and the secondary combustion chamber. Such plan shall include as a minimum:

a. a copy of the standard supplier contract which prohibits the delivery of PCBs in excess of 50 ppm to the facility for incineration.

All laboratory analyses shall be reported to the permittee directly from the laboratory and shall be retained on site and available for inspection by the Ohio EPA for a minimum of five (5) years.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(12) The permittee shall maintain daily records of the materials received for burning at the facility. The records shall contain, as a minimum, the following information:

a. name and address of the facility from which the material was received;

b. name and address of the facility from which the material was generated or blended;

c. date the material was received;

d. amount of material and type of container; and

e. description of the material including chemical composition.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(13) The permittee shall maintain daily records of the materials burned in the kiln and main combustion chamber. The record shall include, but not be limited to, the specific OPLs relating to waste feed rates established during the most recent CPT and reported in the subsequent NOC.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(14) The permittee shall record the date, time, duration, and reason for each automatic waste feed cutoff actuated as a result of the following;

a. an excursion from the RCRA Part B Permit;

b. when any of the following are exceeded: operating parameter limits specified under 40 CFR 63.1209; an emission standard monitored by a continuous emissions monitoring system (CEMS); and the allowable combustion chamber pressure;

c. when the span value of any continuous monitoring system (CMS) detector, except a CEMS, is met or exceeded;

d. upon malfunction of a CMS monitoring an operating parameter limit specified under 40 CFR 63.1209 or an emission level; or

e. when any component of the automatic waste feed cutoff system fails.

A record of the weekly AWFCO operability testing shall be maintained, and/or a record documenting that any weekly inspection will unduly restrict or upset operations, in which case, a monthly inspection shall be conducted and the event documented.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(15) The permittee shall record the fuels used during incinerator startup.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(16) The permittee shall maintain a record of hours of operation of the incineration system. The hours of operation shall be represented by the time during which waste or virgin fuel is being burned.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(17) The permittee shall maintain a system that will allow Ohio EPA, at any time, to access the continuous monitor data from a remote location.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

e) Reporting Requirements

(1) The permittee shall comply with all applicable notification requirements listed in the most recent version of 40 CFR 63.1210. These requirements include, but may not be limited to, the following rule citations:

a. 40 CFR 63.9(b)

Initial notification that you are subject to 40 CFR Part 63, Subpart EEE

40 CFR 63.9(d)

Notification that you are subject to special compliance requirements

40 CFR 63.9(j)

Notification and documentation of any change in information already provided under section 63.9

40 CFR 63.1206(b)(5)(i)

Notification of changes in design, operation, or maintenance

40 CFR 63.1207(e), 63.9(e), 63.9(g)(1) & (3)

Notification of performance test and CMS evaluation

40 CFR 63.1210(b)

Notification of intent to comply

40 CFR 63.1210(d), 63.1207(j), 63.1207(k), 63.1207(l), 63.9(h), 63.10(d)(2), 63.10(e)(2)

Notification of compliance, including results of performance tests and continuous monitoring system performance evaluations

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(2) The permittee shall comply with all applicable reporting requirements listed in the most recent version of 40 CFR 63.1211. These reports include, but are not limited to, the following rule citations and requirements:

a. 40 CFR 63.10(d)(5)(i)

Periodic startup, shutdown, and malfunction reports are required to be submitted semiannually to the Ohio EPA Northeast District Office if a startup or shutdown causes an exceedance of any applicable emission limitation or if a malfunction occurred during the reporting period, and the actions taken by the permittee were consistent with the procedures specified in the startup, shutdown and malfunction plan.

40 CFR 63.10(d)(5)(ii)

Immediate startup, shutdown, and malfunction reports are required to be submitted to the Ohio EPA Northeast District Office if a startup or shutdown causes an exceedance of any applicable emission limitation or if a malfunction occurred

during the reporting period, and the actions taken by the permittee were not consistent with the procedures specified in the startup, shutdown and malfunction plan. The permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event.

40 CFR 63.10(e)(3)

Excessive emissions and continuous monitoring system performance report and summary report are to be submitted to the Ohio EPA Northeast District Office semiannually, except as provided by rule.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. 40 CFR 63.1206(c)(2)(ii)(B)

A Startup, shutdown, and malfunction plan shall be submitted to the Ohio EPA for review and approval.

40 CFR 63.1206(c)(3)(vi)

Excessive exceedances reports. For each set of 10 exceedances of an emission standard or operating requirement (or OPL) while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, the permittee must submit to the Ohio EPA Northeast District Office a written report within 5 calendar days of the 10th exceedance documenting the exceedances and results of the investigation and corrective measures taken.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous emissions monitoring systems (THC or CO, SO2, NO_X, Opacity):

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous emissions monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Northeast District Office documenting all instances of emissions in excess of any applicable limit specified in this permit and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of each continuous emissions monitoring system;

iii. the location of the continuous monitor;

iv. the exceedance report as detailed in (a) above;

v. the total emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous emissions monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. the results of any relative accuracy test audit showing the continuous monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction of the continuous monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime of the continuous monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: Sulfur dioxide emissions shall not exceed 11.34 pounds per hour

Applicable Compliance Method: Compliance shall be determined by operating the continuous emissions monitoring system (CEMS) for sulfur dioxide. Or, if required by Ohio EPA, compliance shall be determined by emissions testing, using U.S. EPA Reference Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. Emission Limitation: Sulfur dioxide emissions shall not exceed 49.69 tons per year.

Applicable Compliance Method: Compliance shall be determined by operating the continuous emissions monitoring system (CEMS) for sulfur dioxide and making the necessary conversion from lb/hr to ton/year.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

c. Emission Limitation: Nitrogen oxides emissions shall not exceed 28.36 pounds per hour.

Applicable Compliance Method: Compliance shall be determined by operating the continuous emissions monitoring system (CEMS) for nitrogen oxides. Or, if required by Ohio EPA, compliance shall be determined by emissions testing, using U.S. EPA Reference Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

d. Emission Limitation: Nitrogen oxides emissions shall not exceed 124.23 tons per year.

Applicable Compliance Method: Compliance shall be determined by operating the continuous emissions monitoring system (CEMS) for nitrogen oxides and making the necessary conversion from lb/hr to ton/year.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

e. Emission Limitation: Dioxin and furan emissions from the stack shall not exceed of 0.20 ng toxicity equivalence (TEQ) per dry standard cubic meter (dscm) corrected to 7 percent oxygen; or 0.40 ng TEQ/dscm corrected to 7 percent oxygen per year corrected to 7 percent oxygen, provided that the combustion gas temperature at the inlet to the initial particulate matter control device is 400 degrees Fahrenheit (F) or lower based on the average of the test run average temperatures.

Applicable Compliance Method: Compliance shall be determined by emission testing, using Method 0023A, Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans emissions from Stationary Sources, EPA Publication SW-846, as incorporated by reference in 40 CFR 63.1208(a). The permittee may sample for a minimum of three hours, and must collect a minimum sample volume of 2.5 dscm. The permittee may assume than nondetects are present at zero concentration.

After performance testing, compliance shall be determined by compliance with the applicable Operating Parameter Limits specified in 40 CFR 63.1209(k), established during the most recent CPT and reported in the subsequent NOC.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

f. Emission Limitation: Mercury emissions from the stack shall not exceed of 130 ug/dscm corrected to 7 percent oxygen.

Applicable Compliance Method: Compliance shall be determined by emission testing, using Method 29, provided in Appendix A of 40 CFR, Part 60.

After performance testing, compliance shall be determined by compliance with the applicable Operating Parameter Limits specified in 40 CFR 63.1209(l), established during the most recent CPT and reported in the subsequent NOC.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

g. Emission Limitation: Combined emissions of lead and cadmium from the stack shall not exceed 240 ug/dscm corrected to 7 percent oxygen. No later than October 14, 2008, combined emissions of lead and cadmium from the stack shall not exceed 230 ug/dscm corrected to 7 percent oxygen.

Applicable Compliance Method: Compliance shall be determined by emission testing, using Method 29, provided in Appendix A of 40 CFR, Part 60.

After performance testing, compliance shall be determined by compliance with the applicable Operating Parameter Limits specified in 40 CFR 63.1209(n), established during the most recent CPT and reported in the subsequent NOC.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

h. Emission Limitation: Combined emissions of arsenic, beryllium, and chromium shall not exceed 97 ug/dscm corrected to 7 percent oxygen. No later than October 14, 2008, combined emissions of arsenic, beryllium, and chromium shall not exceed 92 ug/dscm corrected to 7 percent oxygen.

Applicable Compliance Method: Compliance shall be determined by emission testing, using Method 29, provided in Appendix A of 40 CFR, Part 60.

After performance testing, compliance shall be determined by compliance with the applicable Operating Parameter Limits specified in 40 CFR 63.1209(n), established during the most recent CPT and reported in the subsequent NOC.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

i. Emission Limitation: Beryllium emissions from the stack shall not exceed 10 grams per 24-hour period.

Applicable Compliance Method: Compliance shall be determined by emission testing, using Method 29, provided in Appendix A of 40 CFR, Part 60.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

j. Emission Limitation: Carbon monoxide emissions from the stack shall not exceed 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen and 95.26 tons per year; or Hydrocarbons emissions from the stack shall not exceed 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, reported as propane, and 15.00 tons per year.

Applicable Compliance Method: Compliance shall be determined by operating the continuous emissions monitoring system (CEMS) for carbon monoxide and or hydrocarbons. Or, if required by Ohio EPA, compliance shall be determined by emissions testing, using Method 10 and Methods 18, 25 or 25A, provided in Appendix A of 40 CFR, Part 60.

Compliance with the annual limit shall be determined by making the necessary conversion from the continuous emissions monitoring system to ton/year.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

k. Emission Limitation: Combined hydrochloric acid and chlorine gas emissions from the stack shall not exceed 77 parts per million by volume, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen and 281.17 tons per year. No later than October 14, 2008, combined hydrochloric acid and chlorine gas emissions from the stack shall not exceed 32 parts per million by volume, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen and 116.85 tons per year.

Applicable Compliance Method: Compliance shall be determined by emission testing, using Method 26A, 320, or 321 provided in Appendix A of 40 CFR, Part 60.

Compliance with the annual limit shall be determined by calculation, using the maximum process flow rate in dscm and the most recent result from emission testing, corrected to 7 percent oxygen.

After performance testing, compliance shall be determined by compliance with the applicable Operating Parameter Limits specified in 40 CFR 63.1209(o), established during the most recent CPT and reported in the subsequent NOC.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

l. Emission Limitation: Particulate emissions from the stack shall not exceed 34 mg/dscm corrected to 7 percent oxygen and 28.27 tons per year. No later than October 14, 2008, particulate emissions from the stack shall not exceed 0.013 grain/dscf corrected to 7 percent oxygen and 24.74 tons per year.

Applicable Compliance Method: Compliance shall be determined by emission testing, using Method 5 or 5I, provided in Appendix A of 40 CFR, Part 60.

Compliance with the annual limit shall be determined by calculation, using the maximum process flow rate in dscm and the most recent result from emission testing, corrected to 7 percent oxygen.

After performance testing, compliance shall be determined by compliance with the applicable Operating Parameter Limits specified in 40 CFR 63.1209(m), established during the most recent CPT and reported in the subsequent NOC.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

m. Emission Limitation: This emissions unit shall achieve a destruction and removal efficiency (DRE) of 99.99% for each selected principle organic hazardous constituent (POHC).

Applicable Compliance Method: Compliance shall be determined by emissions testing, using approved U.S. EPA reference methods, and the following equation:

DRE = [1 - (Wout/Win)] x 100%

where:

Win = mass feedrate of one POHC in a waste feedstream; and
Wout = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

After performance testing, compliance shall be determined by compliance with the applicable Operating Parameter Limits specified in 40 CFR 63.1209(j), established during the most recent CPT and reported in the subsequent NOC.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

n. Emission Limitation: Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be determined by operating the continuous opacity monitoring system (COMS). Or, if required by Ohio EPA, compliance shall be determined using Method 9, provided in Appendix A of 40 CFR, Part 60.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

o. Emission Limitation: There shall be no visible particulate emissions of fugitive dust.

Applicable Compliance Method: Compliance shall be determined by compliance with 40 CFR 63.1206(c)(5) pertaining to Combustion System Leaks and with 40 CFR 63.1209(p) pertaining to the Maximum combustion chamber pressure. Or, if required by Ohio EPA, compliance shall be determined using Method 22, provided in Appendix A of 40 CFR, Part 60.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(2) The permittee shall comply with all applicable performance testing requirements contained in the most recent version of 40 CFR 63.1207, using the test methods contained in the most recent version of 40 CFR 63.1208.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(3) The permittee shall notify the Ohio EPA of all Comprehensive Performance Tests and Confirmatory Tests per the requirements of 40 CFR 63.1207(e). The content of the performance test plan shall comply with the requirements of 40 CFR 63.1207(f).

Personnel from Ohio EPA, Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the

control equipment.

Except as provided by 40 CFR 63.1207(j)(4) and (j)(5), within 90 days of completion of a Comprehensive Performance Test, the permittee must postmark a Notification of Compliance documenting compliance with the emission standards and continuous monitoring system requirements, and identifying operating parameter limits under 40 CFR 63.1209.

Except as provided by 40 CFR 63.1207(j)(4), within 90 days of completion of a confirmatory performance test, the permittee must postmark a Notification of Compliance documenting compliance or noncompliance with the applicable dioxin/furan emission standard.

Notifications of Compliance are to be submitted to the Ohio EPA Northeast District Office.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

g) Miscellaneous Requirements

(1) None.

11. P001, CONTAINER PROCESSING

Operations, Property and/or Equipment Description:

Container handling operations include: drum receiving and sampling station, 4-drum heater where material is heated to make it more liquid, drum alter/routing/punch, lab pack storage/repackaging, drum splitting station, drum discrepancy and reactive drum station, drum pumpout to tank farm, direct drum pump out to incinerator, absorbent add station, drum storage room, and extruder. Emissions from the drum handling operations shall vent through a closed-vent system (vapor recovery system) to the incinerator (N001) and/or the carbon adsorption system.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-18743, modification issued 10/9/07. Administrative modification PTI # P0108374)	Organic compounds shall not exceed 3.0 lbs/hr and 13.14 tons per year. See sections b)(2)b through b)(2)p.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from the roof vents shall not exceed 20% opacity as a 6-minute average.
c.	OAC rule 3745-17-07(B)	Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
d.	OAC rule 3745-17-08(B)	The permittee shall utilize reasonable available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
e.	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 0.877 lb/hour.
f.	40 CFR Part 61, Subpart FF	The requirements specified by this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See section b)(2)p.

g.	40 CFR Part 63, Subpart DD	The requirements specified by this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See section b)(2)p.
h.	40 CFR Part 63, Subpart PP	See section b)(2)o.

(2) Additional Terms and Conditions

a. Container processing operations include: Container receiving and sampling station; 4-drum heater where material is heated to make it more liquid; Container alter/routing/punch; Lab pack storage/repackaging; Container splitting station; Container discrepancy and reactive container station; Container pump out to tank farm; Direct drum pump out to Incinerator; Absorbent add station; Container storage room; and Extruder.

b. The container processing operations, identified in section b)(2).a above, shall be housed within a building except for portions of the Extruder. For safety-related reasons, the top portion of the Extruder is located on a mezzanine outside of the Container Processing Building. All processing activities occur within the confines of the Extruder under vapor recovery.

c. The cover and/or opening (e.g., bungs, hatches, and sampling ports) of each container (e.g., drum, tote) located within this emissions unit shall be maintained in a closed, sealed position at all times that waste is in the container except when it is necessary to use the opening for waste loading, removal, inspection, or sampling.

d. The cover and/or opening (e.g., bungs, hatches, and sampling ports) of each container (e.g., drum, tote) located within this emissions unit shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 31.355(h).

e. When a waste is transferred into a container by pumping, the transfer shall be performed by using a submerged fill pipe. The submerged fill pipe outlet shall extend to within two fill pipe diameters of the bottom of the container while the container is being loaded. During loading of the waste, the cover shall remain in place and all openings shall be maintained in a closed, sealed position except for those openings required for the submerged fill pipe, those openings required for venting of the container to prevent physical damage or permanent deformation of the container or cover.

f. The vapor recovery system, or closed-vent system, shall be in operation with operational snorkels in place to capture emissions when waste is being processed. The snorkel(s) is(are) to be adequately placed over the activity in such a manner that maximum capture is achieved.

g. The vapor recovery system shall route organic vapors to the incinerator,

emissions unit N001, and/or to the carbon adsorption system. The incinerator and/or the carbon adsorption system shall be in operation when waste is being processed within this emissions unit.

h. The vapor recovery system upstream from the ventilation header blower shall be operated at a pressure below atmospheric pressure so that there is adequate suction, or inward flow, at each snorkel.

i. The incinerator, as a control device for this emissions unit, shall achieve a destruction efficiency of 99.99% for organic compounds.

j. The carbon adsorption system shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

k. The carbon adsorption system shall consist of two or more trains of a primary and a secondary carbon box operated in series. The trains shall be arranged in parallel. All boxes shall be the same size and have a maximum design flow rate of no less than 10,000 cfm. The carbon adsorption system shall be installed, operated and maintained in accordance with the "Von Roll's Routine Maintenance Procedure for Vapor Recovery Management" initially dated October 27, 2006, (also referred to as the "Routine Maintenance Procedure") and any updated, approved plan thereafter.

l. The existing carbon within the carbon adsorption system shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. Carbon breakthrough will be determined by a reading of 50 ppm as a 60-minute rolling average from the Total Hydrocarbon (THC) Continuous Emissions Monitor (CEM) located between the first and second carbon bed in each train. This CEM shall be referred to as an Inter-Box CEM. The permittee is permitted to replace the carbon more frequently, i.e., before breakthrough is indicated, if the permittee determines that the carbon within any box is not effectively adsorbing volatile organic compounds, including benzene.

m. The vapor recovery system, or closed-vent system, shall comply with the following requirements:

    i. Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).

    ii. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

    iii. One or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

n. The permittee shall control equipment leaks from each equipment component of this emissions unit in accordance with sections 61.242 through 61.247 in 40 CFR Part 61, Subpart V - National Emission Standards for Equipment Leaks.

o. 40 CFR 63.688 (standards for containers) refers to 40 CFR Part 63, Subpart PP for the control of air emissions from a container. The following requirements are specified for the containers located within this emissions unit:

i. If a container has a design capacity greater than 0.1 m3 and less than or equal to 0.46 m3, or if it has a design capacity greater than 0.46 m3 and the container is not in light material service as defined in Section 63.681, then the permittee controls air emissions from the container in accordance with Container Level 1, 2 or 3 controls, as specified in 40 CFR Part 63, Subpart PP.

ii. If a container has a design capacity greater than 0.46 m3 and the container is in light material service as defined in Section 63.681, then the permittee controls air emissions from the container in accordance with the standards for Container Level 2 or 3 controls, as specified in 40 CFR Part 63, Subpart PP.

iii. If a container has a design capacity greater than 0.1 m3 and is used for treatment of an off-site material by a waste stabilization process as defined in Section 63.681, then the permittee controls air emissions from the container at those times during the process when the off-site material in the container is exposed to the atmosphere in accordance with the standards for Container Level 3 controls, as specified in 40 CFR Part 63, Subpart PP.

p. When this emissions unit is subject to the requirements of 40 CFR Part 61, Subpart FF (National Emissions Standards for Benzene Waste Operation), the permittee is exempt from Section 63.688 (standards for containers) of 40 CFR Part 63, Subpart DD. Because benzene may be present in the waste handled by this emissions unit at any given time, the requirements contained in both 40 CFR Part 61, Subpart FF and 40 CFR Part 63, Subpart DD serve as a basis for determining the Best Available Technology established pursuant to OAC rule 3745-31-05(A)(3).

q. Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous THC monitoring system, designed to ensure continuous valid and representative readings of THC emissions in units of parts per million. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous THC monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of parts per million, in accordance with and at the frequencies required per 40 CFR Part 60.

c) Operational Restrictions

(1) The permittee shall operate a sufficient number of trains in the carbon adsorption system to ensure that the flow rate through each primary carbon box does not exceed the manufacturer's recommended maximum design air flow rate.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(2) When breakthrough within a train of the carbon adsorption system occurs, the permittee shall discontinue the use of that train as soon as possible but not longer than 12 hours after detection of breakthrough. The change-out must be completed within 48 hours after the use of the train that has been discontinued. The change-out shall be performed such that the secondary carbon box becomes the primary box and a new carbon box is installed as the secondary box.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(3) If an Inter-Box CEMS reading is equal to or greater than 50 ppm on a 60-minute rolling average within 15 days after a change-out, the permittee is not required to initiate and complete a new change-out of the primary box pursuant to the Routine Maintenance Procedure. Instead, as expeditiously as possible, the permittee shall initiate and complete an investigation of the cause of the elevated Inter-Box CEMS reading to determine if the carbon within the primary box actually is spent or otherwise not functional. If the permittee determines the carbon within the primary box is spent or otherwise not functional, the permittee shall immediately initiate and complete a change-out of the primary box pursuant to the Routine Maintenance Procedure. If the permittee determines that the elevated Inter-Box CEMS reading is not caused by spent or non-functional carbon, the permittee shall implement corrective actions, if any to eliminate the cause(s) of the elevated readings. If within 5 days after the elevated Inter-Box CEMS reading, the permittee cannot determine the cause of the elevated reading, the permittee immediately shall initiate and complete a change-out of the primary box pursuant to the Routine Maintenance Procedure.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

(4) The permittee shall maintain on-site a sufficient supply of fresh carbon or a spare carbon box containing fresh carbon to enable a change-out procedure to be performed in a timely manner.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-18743)

d) Monitoring and/or Recordkeeping Requirements

(1) Each cover and/or opening of the containers located within this emissions unit shall be visually inspected initially and quarterly thereafter to ensure that they are closed and gasketed properly, if not being processed at the time. If a broken seal or gasket is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification. Each cover and/or opening of the containers shall also be inspected initially and at least one per year by the methods specified in Section 61.355(h) to determine if the containers are operating with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(2) The permittee shall perform quarterly, visual inspections of the vapor recovery system and control devices (incinerator and carbon adsorption system). The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connection.

If visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the vapor recovery system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed. Exception for delay of repair would be allowed per 40 CFR 61.350.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(3) The permittee shall install, calibrate, operate and maintain equipment to continuously monitor and record total hydrocarbons (THC), in units of parts per million, between the first and second carbon bed of each train of the carbon adsorption system (Inter-Box CEMS) for the purpose of determining breakthrough. A THC monitor and recorder shall also be on the exhaust vent stream.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

a. A statement of approval of the continuous THC monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the performance specifications tests and a statement by the Agency that the system is considered approved for use in accordance with the requirements of 40 CFR Part 60, Appendix B, performance Specification 8A - Specifications and Test Procedures for Total Hydrocarbon Continuous Monitoring Systems in Stationary Sources. Proof of approval shall be made available to the Director (Ohio EPA Northeast District Ohio) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in parts per million, and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. The permittee shall operate and maintain equipment to continuously monitor and record THC emissions in units of parts per million. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

c. The permittee shall maintain records of data obtained by the continuous THC monitoring system including, but not limited to:

i. emissions of THCs in parts per million on an instantaneous (one-minute) basis;

ii. emissions of THCs in parts per million on a 60-minute rolling average;

iii. results of quarterly cylinder gas audits;

iv. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

v. results of required relative accuracy test audit (or PS 8A alternative);

vi. hours of operation of the emissions unit, continuous THC monitoring system, and carbon adsorption system;

vii. the date, time, and hours of operation of the emissions unit without the carbon adsorption system and/or the continuous THC monitoring system;

viii. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous THC monitoring system; and

ix. the reason (if known) and the corrective actions taken (if any) for each such event in (c.vii) and (c.viii). These records shall be kept at the facility no less than 3 years and be available for inspection upon request by the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(4) With respect to each Inter-Box CEMS, the permittee shall comply with Performance Specification 8A, except that the permittee shall:

a. to the extent that the permittee utilizes two ducts between each primary and each secondary box for pressure control purposes, be permitted to utilize a sample location on only one of the two ducts;

b. keep the sample probe heated to approximately the same temperature as, or slightly higher than, the temperature inside the duct in which it is inserted;

c. establish a span value of 200 ppm propane; and

d. utilize the following three test points for conducting calibration error tests:

i. Zero Level: zero to 0.1 ppm;

ii. Mid-Level: 40 to 60 ppm;

iii. High-Level: 140 to 160 ppm.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(5) On a continuous basis, the permittee shall direct the Inter-Box CEMS data to the facility's control system and shall maintain an alarm that will sound whenever breakthrough between a primary and a secondary carbon box occurs.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(6) During times when a train of the carbon adsorption system is not in use, the permittee shall record "no flow" instead of a THC concentration for the respective Inter-Box CEMS.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(7) The permittee shall maintain, and retain for the life of each control device, the following records:

a. statement signed and dated by the permittee certifying that the vapor recovery system and control device (incinerator and carbon adsorption system) are designed to operate at the documented performance level when this emissions unit is operating at the highest load or capacity. The document will therefore include the following:

i. a statement certifying that the vapor recovery system is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, is designed so that all gauging and sampling devices be gas-tight except when gauging or sampling is taking place, and that any rupture discs remain closed during normal operation.

ii. a statement certifying that the incinerator can achieve a 99.99% reduction efficiency for organic compounds when this emissions unit is operating at its highest load or capacity; and

iii. a statement certifying that the carbon adsorption system can achieve a 95% control efficiency for organic compounds when this emissions unit is operating at its highest load or capacity.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. the design analysis showing control device performance. The design analysis shall include specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts.

For the incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

For the carbon adsorption system, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(8) The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the vapor recovery system upstream from the ventilation header blower. This record shall be reviewed at least once per day.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(9) The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a device to continuously monitor the temperature in the combustion chamber of the incinerator, as a control device for this emissions unit. The temperature monitoring device shall have an accuracy of plus or minus 1 percent of the temperature being monitored in degree Celsius, or plus or minus 0.5 degree Celsius, whichever is greater. This record shall be reviewed according to the terms and conditions for emissions unit N001.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(10) The permittee shall maintain records that contain the following information:

a. a record of any time when the vapor recovery system was not in operation when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;

b. any time when emissions in the vapor recovery system were not vented to either the incinerator and/or the carbon adsorption system when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;

c. any record indicating that the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action, if any;

d. any time when pumping occurred without submerged fill. The record should include the date and an explanation; and

e. any record indicating detectable emissions from the vapor recovery system, cover and/or opening of any container, and/or any equipment component of this emissions unit. This record may be included in the monthly Leak Detection and Repair Program report.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

(11) The permittee shall perform daily checks, when weather conditions allow, for any fugitive visible emissions for one calendar quarter. The presence or absence of any fugitive visible emissions shall be noted in an operations log. If fugitive visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

If no visible emissions are noted for each daily inspection during that calendar quarter, then the frequency may become weekly. If visible emissions are noted during a weekly inspection, the permittee shall revert to daily inspections and perform daily inspections until no visible emissions are documented for an entire calendar quarter, at which time the permittee may again perform inspections on a weekly basis.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period. With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal emissions.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. any time when the vapor recovery system was not in operation when waste was processed within this emissions unit;

b. any time when emissions in the vapor recovery system were not vented to either the incinerator and/or the carbon adsorption system when waste was processed within this emissions unit;

c. any record indicating the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit;

d. any record indicating detectable emissions from the vapor recovery system, cover and/or opening of any container, and/or any equipment component of this emissions unit; and

e. each day or week during which any visible emissions were observed and the corrective actions taken.

The written reports shall be submitted quarterly to the Ohio EPA Northeast District Office, i.e., by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters.

If no deviation occurred during a calendar quarter, the permittee shall submit a quarterly report which states that no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: Organic compounds shall not exceed 3.0 lbs/hr and 13.14 tons per year

Applicable Compliance Method: If required by Ohio EPA, compliance shall be determined by emission testing for this emissions unit in accordance with Methods 18, 25 or 25A of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

b. Emission Limitation: Visible particulate emissions from the roof vents shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

c. Emissions Limitation: Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

d. Emissions Limitation: Particulate emissions shall not exceed 0.887 lb/hour.

Applicable Compliance Method: If required by Ohio EPA, compliance shall be determined by emission testing for this emissions unit in accordance with Method 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-18743)

g) Miscellaneous Requirements

(1) None.

12. P003, TANKER TRANSFER STATION (BAY 2)

Operations, Property and/or Equipment Description:

Tanker trucks unload liquid material that is piped to either the incinerator or to the tank farm. Blended material from tank farm may also be piped back to station for loading into tanker truck.

Emissions generated from unloading and loading at the station are vented to the vapor recovery system.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-20067, modification issued 9/26/06)	Organic compound (OC) emissions shall not exceed 3.5 pounds per hour, 15.1 tons per year. Fugitive OC emissions shall not exceed 33.7 tons per year. See sections b)(2)a. through b)(2)l.
b.	40 CFR Part 61, Subpart FF	The requirements specified by this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See section b)(2)l.
c.	40 CFR Part 63, Subpart DD	The requirements specified by this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See section b)(2)l.

(2) Additional Terms and Conditions

a. The doors of this emissions unit shall be closed when waste is being processed within this emissions unit.

b. The vapor recovery system, or closed-vent system, shall be in operation with operational snorkels in place to capture 90% of emissions when waste is being processed within this emissions unit. The snorkel is to be placed directly over the tanker vent in a manner in which the vent is inside the snorkel.

c. The vapor recovery system shall route organic vapors to the incinerator, emissions unit N001, and/or to the carbon adsorption system. The incinerator and/or the carbon adsorption system shall be in operation when waste is being processed within this emissions unit.

d. The vapor recovery system upstream from the ventilation header blower shall be operated at a pressure below atmospheric pressure so that there is adequate suction, or inward flow, at the snorkel.

e. The incinerator, as a control device for this emissions unit, shall achieve a destruction efficiency of 99.99% for organic compounds.

f. The carbon adsorption system shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

g. The transfer system conveying the liquid waste to and from the tank farm and to the incinerator shall consist of continuous hard piping. All joints or seams between the pipe section shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange). However, a flexible hose from the pump to the tanker is allowed.

h. The vapor recovery system, or closed-vent system, shall comply with the following requirements:

    i. Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).

    ii. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

    iii. One or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

i. When a tanker truck is loaded, it shall be loaded only by the submerged fill method. The end of the submerged pipe, or point of liquid transfer, shall be within two fill pipe diameters of the bottom of the tanker truck. Any hatch or opening of the tanker truck shall also remain closed during loading, except for those opening(s) necessary for venting to prevent physical damage or deformation of the tanker truck.

j. The permittee shall control equipment leaks from each equipment component of this emissions unit in accordance with sections 61.242 through 61.247 in 40 CFR Part 61, Subpart V - National Emission Standards for Equipment Leaks.

k. Only one activity, loading or unloading, may be performed at any one time.

Calculated emissions from loading activities are greater than those for unloading. The hourly emissions limit of 3.5 lbs OC/hour is based on the maximum potential emissions from the loading activity of a worse case fuel blend mixture, a loading loss value of 41.9 lbs/1,000 gallons, a maximum loading throughput of 44,000 gallons per 24 hours, and control by the carbon adsorption system with a 95% control efficiency.

l. When this emissions unit is subject to the requirements of 40 CFR 61, Subpart FF (National Emissions Standards for Benzene Waste Operations), the permittee is exempt from Section 63.689 (standards for transfer system) of 40 CFR 63, Subpart DD. Because benzene may be present in the waste handled by this emissions unit at any given time, the requirements contained in both 40 CFR 61, Subpart FF and 40 CFR 63, Subpart DD serve as a basis for determining the Best Available Technology established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) Only one activity, loading or unloading, may be performed at any one time.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(2) The permittee shall restrict certain waste streams from being processed and/or blended in this emissions unit in accordance with the State of Ohio Hazardous Waste Facility Installation and Operation Permit.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(3) The maximum loading throughput of 44,000 gallons per day shall not be exceeded.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(4) The physical properties of the waste stream handled by this emissions unit shall not cause the calculated loading loss value to be more than 41.9 pounds per 1,000 gallons.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(5) The existing carbon within the carbon adsorption system shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. Carbon breakthrough will be determined by the most current practice acceptable to the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day:

a. the number of gallons loaded;

b. the calculated loading loss value, in lbs/1,000 gallons, for the waste stream handled that day by this emissions unit during a day when loading activities occurred. If more than one type of waste stream was handled, the permittee shall use the one with the highest vapor pressure. The loading loss value shall be calculated by the following equation, taken from AP-42 Chapter 5.2 (1/95):

L = 12.46 (S x P x M) / T

where:

L = Loading loss, in lbs/1,000 gallons

S = Saturation factor, value found in Table 5.2-1 of AP-42, Chapter 5.2.

P = True vapor pressure of material, in psia.

M = Molecular weight of material, in lb/lb-mole. If the molecular weight of the fuel blend cannot be determined, the permittee shall use the highest molecular weight from the current list of possible constituents that contribute to organic emissions.

T = Temperature of material, in degree rankine.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(2) The permittee shall monitor for detectable fugitive organic compound emissions over all covers, hatches, and ports of any tanker truck containing waste if the tanker truck remains on-site for over 24 hours. No detectable emissions would be indicated by an instrument reading of less than 500 ppmv above background.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(3) The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the organic compound emissions from the exhaust vent stream from the carbon adsorption system. This record shall be reviewed at least once per day.

(Authority for term: OAC rule 3745-77-70(C)(1) and PTI 02-20067)

(4) The permittee shall maintain, and retain for the life of each control device, the following records:

a. statement signed and dated by the permittee certifying that the vapor recovery system and control device (incinerator and carbon absorption system) are designed to operate at the documented performance level when this emissions unit is operating at the highest load or capacity. The document will therefore include the following:

i. a statement certifying that the vapor recovery system is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, is designed so that all gauging and sampling devices be gas-tight except when gauging or sampling is taking place, and that any rupture discs remain closed during normal operation.

ii. a statement certifying that the incinerator can achieve a 99.99 % reduction efficiency for organic compounds when this emissions unit is operating at its highest load or capacity; and

iii. a statement certifying that the carbon adsorption system can achieve a

95% control efficiency for organic compounds when this emissions unit is operating at its highest load or capacity.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

b. the design analysis showing control device performance. The design analysis shall include specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts.

For the incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

For the carbon adsorption system, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(5) The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the vapor recovery system upstream from the ventilation header blower. This record shall be reviewed at least once per day.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(6) The permittee install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the temperature in the combustion chamber of the incinerator, as a control device for this emissions unit. The temperature monitoring device shall have an accuracy of plus or minus 1 percent of the temperature being monitored in degree Celsius, or plus or minus 0.5 degree Celsius, whichever is greater. This record shall be reviewed according to the terms and conditions for emissions unit N001 under a separate permit.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(7) The permittee shall perform quarterly, visual inspections of the vapor recovery system and control devices (incinerator and carbon adsorption system). The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.

If visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the vapor recovery system and control device shall be made as soon as practicable but no later than 5 calendar days

after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed. Exception for delay of repair would be allowed per 40 CFR 61.350.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(8) The permittee shall maintain records that contain the following information:

a. a record of any time when the vapor recovery system was not in operation when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;

b. any time when emissions in the vapor recovery system were not vented to either the incinerator and/or the carbon adsorption system when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;

c. any record indicating that the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action, if any;

d. any time when loading occurred without submerged fill. The record should include the date and an explanation;

e. any record indicating detectable emissions from the vapor recovery system or from any equipment component of this emissions unit. This record may be included in the monthly Leak Detection and Repair Program report; and

f. any record indicating the loading and unloading activities occurred at the same time within this emissions unit. This record should include the date and an explanation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each day when the number of gallons loaded exceeded 44,000 gallons;

b. each day when the calculated loading loss value exceeded 41.9 pounds per 1,000 gallons;

c. any time when the vapor recovery system was not in operation when waste was processed within this emissions unit;

d. any time when emissions in the vapor recovery system were not vented to either the incinerator and/or the carbon adsorption system when waste was processed within this emissions unit;

e. any record indicating the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit;

f. each day when loading occurred without submerged fill;

g. any record indicating detectable emissions from the vapor recovery system or from any equipment component of this emissions unit; and

h. any record indicating the loading and unloading activities occurred at the same time within this emissions unit.

The written reports shall be submitted quarterly to the Ohio EPA Northeast District Office, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

If no deviation occurred during a calendar quarter, the permittee shall submit a quarterly report which states that no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: Organic compound emissions shall not exceed 3.5 pounds per hour.

Applicable Compliance Method: Compliance shall be assumed when the maximum loading throughput is less than 44,000 gallons per day, the calculated loading loss of the material handled each day of operation is equal to or less than 41.9 lbs/1,000 gallons, and the carbon adsorption system is demonstrated to recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

b. Emission Limitation: Organic compound emissions shall not exceed 15.1 tons per year.

Applicable Compliance Method: Compliance with the above emissions limitation is demonstrated when compliance with the hourly emissions rate is achieved.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

c. Emission Limitation: Fugitive organic compound emissions shall not exceed 33.7 tons per year.

Applicable Compliance Method: Compliance shall be assumed when the maximum loading throughput is less than 44,000 gallons per day, the calculated loading loss of the material handled each day of operation is equal to or less than 41.9

lbs/1,000 gallons, and the carbon adsorption system is demonstrated to recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

d. Emission Limitation: The incinerator, as a control device for this emissions unit, shall achieve a destruction efficiency of 99.99% for organic compounds.

Applicable Compliance Method: The incinerator is already required to achieve a destruction efficiency of 99.99% for Principle Organic Hazardous Constituents (POHCs) under a separate permit for emissions unit N001. Comprehensive Performance Testing (CPT) established that the incinerator meets the required destruction efficiency of 99.99% for POHCs, which represents the more difficult organic compounds to destroy. To remain in compliance with this requirement, the incinerator must operate within the operating parameter limits established during the CPT, or most recent testing, as stated in the terms and conditions for emissions unit N001 under separate permit.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

e. Emission Limitation: The carbon adsorption system shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

Applicable Compliance Method: Compliance shall be demonstrated by the monitoring and record keeping in section d)(4).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

g) Miscellaneous Requirements

(1) None.

13. P004, TANKER TRANSFER STATION (BAY 3)

Operations, Property and/or Equipment Description:

Tanker trucks unload liquid material that is piped to either the incinerator or to the tank farm. Blended material from tank farm may also be piped back to station for loading into tanker truck. Emissions generated from unloading and loading at the station are vented to the vapor recovery system.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-20067, modification issued 9/26/06)	Organic compound (OC) emissions shall not exceed 3.5 pounds per hour, 15.1 tons per year. Fugitive OC emissions shall not exceed 33.7 tons per year. See sections b)(2)a. through b)(2)l.
b.	40 CFR Part 61, Subpart FF	The requirements specified by this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See section b)(2)l.
c.	40 CFR Part 63, Subpart DD	The requirements specified by this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See section b)(2)l.

(2) Additional Terms and Conditions

a. The doors of this emissions unit shall be closed when waste is being processed within this emissions unit.

b. The vapor recovery system, or closed-vent system, shall be in operation with operational snorkels in place to capture 90% of emissions when waste is being processed within this emissions unit. The snorkel is to be placed directly over the tanker vent and/or container opening in a manner in which the tanker vent and/or container opening is inside the snorkel.

c. The vapor recovery system shall route organic vapors to the incinerator, emissions unit N001, and/or to the carbon adsorption system. The incinerator and/or the carbon adsorption system shall be in operation when waste is being processed within this emissions unit.

d. The vapor recovery system upstream from the ventilation header blower shall be operated at a pressure below atmospheric pressure so that there is adequate suction, or inward flow, at the snorkel.

e. The incinerator, as a control device for this emissions unit, shall achieve a destruction efficiency of 99.99% for organic compounds.

f. The carbon adsorption system shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

g. The transfer system conveying the liquid waste to and from the tank farm and to the incinerator shall consist of continuous hard piping. All joints or seams between the pipe section shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange). However, a flexible hose from the pump or container to the tanker is allowed.

h. The vapor recovery system, or closed-vent system, shall comply with the following requirements:

    i. Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).

    ii. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

    iii. One or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

i. When a tanker truck is loaded, it shall be loaded only by the submerged fill method. The end of the submerged pipe, or point of liquid transfer, shall be within two fill pipe diameters of the bottom of the tanker truck. Any hatch or opening of the tanker truck shall also remain closed during loading, except for those opening(s) necessary for venting to prevent physical damage or deformation of the tanker truck.

j. The permittee shall control equipment leaks from each equipment component of this emissions unit in accordance with sections 61.242 through 61.247 in 40 CFR Part 61, Subpart V - National Emission Standards for Equipment Leaks.

k. Only one activity, loading or unloading, may be performed at any one time. Calculated emissions from loading activities are greater than those for unloading. The hourly emissions limit of 3.5 lbs OC/hour is based on the maximum potential emissions from the loading activity of a worse case fuel blend mixture, a loading loss value of 41.9 lbs/1,000 gallons, a maximum loading throughput of 44,000 gallons per 24 hours, and control by the carbon adsorption system with a 95% control efficiency.

l. When this emissions unit is subject to the requirements of 40 CFR 61, Subpart FF (National Emissions Standards for Benzene Waste Operations), the permittee is exempt from Section 63.689 (standards for transfer system) of 40 CFR 63, Subpart DD. Because benzene may be present in the waste handled by this emissions unit at any given time, the requirements contained in both 40 CFR 61, Subpart FF and 40 CFR 63, Subpart DD serve as a basis for determining the Best Available Technology established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) Only one activity, loading or unloading, may be performed at any one time.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(2) The permittee shall restrict certain waste streams from being processed and/or blended in this emissions unit in accordance with the State of Ohio Hazardous Waste Facility Installation and Operation Permit.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(3) The maximum loading throughput of 44,000 gallons per day shall not be exceeded.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(4) The physical properties of the waste stream handled by this emissions unit shall not cause the calculated loading loss value to be more than 41.9 pounds per 1,000 gallons.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(5) The existing carbon within the carbon adsorption system shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. Carbon breakthrough will be determined by the most current practice acceptable to the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day:

a. the number of gallons loaded;

b. the calculated loading loss value, in lbs/1,000 gallons, for the waste stream handled that day by this emissions unit during a day when loading activities occurred. If more than one type of waste stream was handled, the permittee shall use the one with the highest vapor pressure. The loading loss value shall be calculated by the following equation, taken from AP-42 Chapter 5.2 (1/95):

L = 12.46 (S x P x M) / T

where:

L = Loading loss, in lbs/1,000 gallons

S = Saturation factor, value found in Table 5.2-1 of AP-42, Chapter 5.2.

P = True vapor pressure of material, in psia.

M = Molecular weight of material, in lb/lb-mole. If the molecular weight of the fuel blend cannot be determined, the permittee shall use the highest molecular weight from the current list of possible constituents that contribute to organic emissions.

T = Temperature of material, in degree rankine.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(2) The permittee shall monitor for detectable fugitive organic compound emissions over all covers, hatches, and ports of any tanker truck containing waste if the tanker truck remains on-site for over 24 hours. No detectable emissions would be indicated by an instrument reading of less than 500 ppmv above background.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(3) The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the organic compound emissions from the exhaust vent stream from the carbon adsorption system. This record shall be reviewed at least once per day.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(4) The permittee shall maintain, and retain for the life of each control device, the following records:

a. a statement signed and dated by the permittee certifying that the vapor recovery system and control device (incinerator and carbon absorption system) are designed to operate at the documented performance level when this emissions unit is operating at the highest load or capacity. The document will therefore include the following:

i. a statement certifying that the vapor recovery system is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, is designed so that all gauging and sampling devices be gas-tight except when gauging or sampling is taking place, and that any rupture discs remain closed during normal operation.

ii. a statement certifying that the incinerator can achieve a 99.99 % reduction efficiency for organic compounds when this emissions unit is operating at its highest load or capacity; and

iii. a statement certifying that the carbon adsorption system can achieve a 95% control efficiency for organic compounds when this emissions unit is operating at its highest load or capacity.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

b. the design analysis showing control device performance. The design analysis shall include specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts.

For the incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

For the carbon adsorption system, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(5) The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the vapor recovery system upstream from the ventilation header blower. This record shall be reviewed at least once per day.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(6) The permittee install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the temperature in the combustion chamber of the incinerator, as a control device for this emissions unit. The temperature monitoring device shall have an accuracy of plus or minus 1 percent of the temperature being monitored in degree Celsius, or plus or minus 0.5 degree Celsius, whichever is greater. This record shall be reviewed according to the terms and conditions for emissions unit N001 under a separate permit.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(7) The permittee shall perform quarterly, visual inspections of the vapor recovery system and control devices (incinerator and carbon adsorption system). The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.

If visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the vapor recovery system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed. Exception for delay of repair would be allowed per 40 CFR 61.350.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(8) The permittee shall maintain records that contain the following information:

a. a record of any time when the vapor recovery system was not in operation when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;

b. any time when emissions in the vapor recovery system were not vented to either the incinerator and/or the carbon adsorption system when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;

c. any record indicating that the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action, if any;

d. any time when loading occurred without submerged fill. The record should include the date and an explanation;

e. any record indicating detectable emissions from the vapor recovery system or from any equipment component of this emissions unit. This record may be included in the monthly Leak Detection and Repair Program report; and

f. any record indicating the loading and unloading activities occurred at the same time within this emissions unit. This record should include the date and an explanation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each day when the number of gallons loaded exceeded 44,000 gallons;

b. each day when the calculated loading loss value exceeded 41.9 pounds per 1,000 gallons;

c. any time when the vapor recovery system was not in operation when waste was processed within this emissions unit;

d. any time when emissions in the vapor recovery system were not vented to either

the incinerator and/or the carbon adsorption system when waste was processed within this emissions unit;

e. any record indicating the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit;

f. each day when loading occurred without submerged fill;

g. any record indicating detectable emissions from the vapor recovery system or from any equipment component of this emissions unit; and

h. any record indicating the loading and unloading activities occurred at the same time within this emissions unit.

The written reports shall be submitted quarterly to the Ohio EPA Northeast District Office, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

If no deviation occurred during a calendar quarter, the permittee shall submit a quarterly report which states that no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: Organic compound emissions shall not exceed 3.5 pounds per hour.

Applicable Compliance Method: Compliance shall be assumed when the maximum loading throughput is less than 44,000 gallons per day, the calculated loading loss of the material handled each day of operation is equal to or less than 41.9 lbs/1,000 gallons, and the carbon adsorption system is demonstrated to recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

b. Emission Limitation: Organic compound emissions shall not exceed 15.1 tons per year.

Applicable Compliance Method: Compliance with the above emissions limitation is demonstrated when compliance with the hourly emissions rate is achieved.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

c. Emission Limitation: Fugitive organic compound emissions shall not exceed 33.7 tons per year.

Applicable Compliance Method: Compliance shall be assumed when the maximum loading throughput is less than 44,000 gallons per day, the calculated loading loss of the material handled each day of operation is equal to or less than 41.9 lbs/1,000 gallons, and the carbon adsorption system is demonstrated to recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

d. Emission Limitation: The incinerator, as a control device for this emissions unit, shall achieve a destruction efficiency of 99.99% for organic compounds.

Applicable Compliance Method: The incinerator is already required to achieve a destruction efficiency of 99.99% for Principle Organic Hazardous Constituents (POHCs) under a separate permit for emissions unit N001. Comprehensive Performance Testing (CPT) established that the incinerator meets the required destruction efficiency of 99.99% for POHCs, which represents the more difficult organic compounds to destroy. To remain in compliance with this requirement, the incinerator must operate within the operating parameter limits established during the CPT, or most recent testing, as stated in the terms and conditions for emissions unit N001 under separate permit.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

e. Emission Limitation: The carbon adsorption system shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

Applicable Compliance Method: Compliance shall be demonstrated by the monitoring and record keeping in section d)(4).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

g) Miscellaneous Requirements

(1) None.

14. P005, TANKER TRANSFER STATION (BAY 1)

Operations, Property and/or Equipment Description:

Tanker trucks unload liquid material that is piped to either the incinerator or to the tank farm. Blended material from tank farm may also be piped back to station for loading into tanker truck. Emissions generated from unloading and loading at the station are vented to the vapor recovery system. Waste containers not involving organics may also be split in this bay, from larger to smaller containers. Emissions are negligible.

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

h) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-20067, modification issued 9/26/06)	Organic compound (OC) emissions shall not exceed 3.5 pounds per hour, 15.1 tons per year. Fugitive OC emissions shall not exceed 33.7 tons per year. See sections b)(2)a through b)(2)l.
b.	40 CFR Part 61, Subpart FF	The requirements specified by this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See section b)(2)l.
c.	40 CFR Part 63, Subpart DD	The requirements specified by this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See section b)(2)l.

(2) Additional Terms and Conditions

a. The doors of this emissions unit shall be closed when waste is being processed

within this emissions unit.

b. The vapor recovery system, or closed-vent system, shall be in operation with operational snorkels in place to capture 90% of emissions when waste is being processed within this emissions unit. The snorkel is to be placed directly over the tanker vent and/or container opening in a manner in which the tanker vent and/or container opening is inside the snorkel.

c. The vapor recovery system shall route organic vapors to the incinerator, emissions unit N001, and/or to the carbon adsorption system. The incinerator and/or the carbon adsorption system shall be in operation when waste is being processed within this emissions unit.

d. The vapor recovery system upstream from the ventilation header blower shall be operated at a pressure below atmospheric pressure so that there is adequate suction, or inward flow, at the snorkel.

e. The incinerator, as a control device for this emissions unit, shall achieve a destruction efficiency of 99.99% for organic compounds.

f. The carbon adsorption system shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

g. The transfer system conveying the liquid waste to and from the tank farm and to the incinerator shall consist of continuous hard piping. All joints or seams between the pipe section shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange). However, a flexible hose from the pump or container to the tanker is allowed.

h. The vapor recovery system, or closed-vent system, shall comply with the following requirements:

    i. Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).

    ii. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

    iii. One or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

i. When a tanker truck is loaded, it shall be loaded only by the submerged fill method. The end of the submerged pipe, or point of liquid transfer, shall be within two fill pipe diameters of the bottom of the tanker truck. Any hatch or opening of

the tanker truck shall also remain closed during loading, except for those opening(s) necessary for venting to prevent physical damage or deformation of the tanker truck.

j. The permittee shall control equipment leaks from each equipment component of this emissions unit in accordance with sections 61.242 through 61.247 in 40 CFR Part 61, Subpart V - National Emission Standards for Equipment Leaks.

k. Only one activity, loading or unloading, may be performed at any one time. Calculated emissions from loading activities are greater than those for unloading. The hourly emissions limit of 3.5 lbs OC/hour is based on the maximum potential emissions from the loading activity of a worse case fuel blend mixture, a loading loss value of 41.9 lbs/1,000 gallons, a maximum loading throughput of 44,000 gallons per 24 hours, and control by the carbon adsorption system with a 95% control efficiency.

l. When this emissions unit is subject to the requirements of 40 CFR 61, Subpart FF (National Emissions Standards for Benzene Waste Operations), the permittee is exempt from Section 63.689 (standards for transfer system) of 40 CFR 63, Subpart DD. Because benzene may be present in the waste handled by this emissions unit at any given time, the requirements contained in both 40 CFR 61, Subpart FF and 40 CFR 63, Subpart DD serve as a basis for determining the Best Available Technology established pursuant to OAC rule 3745-31-05(A)(3).

i) Operational Restrictions

(1) Only one activity, loading or unloading, may be performed at any one time.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(2) The permittee shall restrict certain waste streams from being processed and/or blended in this emissions unit in accordance with the State of Ohio Hazardous Waste Facility Installation and Operation Permit.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(3) The maximum loading throughput of 44,000 gallons per day shall not be exceeded.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(4) The physical properties of the waste stream handled by this emissions unit shall not cause the calculated loading loss value to be more than 41.9 pounds per 1,000 gallons.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

(5) The existing carbon within the carbon adsorption system shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. Carbon breakthrough will be determined by the most current practice acceptable to the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 02-20067)

j) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day:

a. the number of gallons loaded;

b. the calculated loading loss value, in lbs/1,000 gallons, for the waste stream handled that day by this emissions unit during a day when loading activities occurred. If more than one type of waste stream was handled, the permittee shall use the one with the highest vapor pressure. The loading loss value shall be calculated by the following equation, taken from AP-42 Chapter 5.2 (1/95):

L = 12.46 (S x P x M) / T

where:

L = Loading loss, in lbs/1,000 gallons

S = Saturation factor, value found in Table 5.2-1 of AP-42, Chapter 5.2.

P = True vapor pressure of material, in psia.

M = Molecular weight of material, in lb/lb-mole. If the molecular weight of the fuel blend cannot be determined, the permittee shall use the highest molecular weight from the current list of possible constituents that contribute to organic emissions.

T = Temperature of material, in degree rankine.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(2) The permittee shall monitor for detectable fugitive organic compound emissions over all covers, hatches, and ports of any tanker truck containing waste if the tanker truck remains on-site for over 24 hours. No detectable emissions would be indicated by an instrument reading of less than 500 ppmv above background.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(3) The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the organic compound emissions from the exhaust vent stream from the carbon adsorption system. This record shall be reviewed at least once per day.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(4) The permittee shall maintain, and retain for the life of each control device, the following records:

a. a statement signed and dated by the permittee certifying that the vapor recovery system and control device (incinerator and carbon absorption system) are designed to operate at the documented performance level when this emissions unit is operating at the highest load or capacity. The document will therefore include the following:

i. a statement certifying that the vapor recovery system is designed to operate with no detectable emissions as indicated by an instrument

reading of less than 500 ppmv above background, is designed so that all gauging and sampling devices be gas-tight except when gauging or sampling is taking place, and that any rupture discs remain closed during normal operation.

ii. a statement certifying that the incinerator can achieve a 99.99 % reduction efficiency for organic compounds when this emissions unit is operating at its highest load or capacity; and

iii. a statement certifying that the carbon adsorption system can achieve a 95% control efficiency for organic compounds when this emissions unit is operating at its highest load or capacity.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

b. the design analysis showing control device performance. The design analysis shall include specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts.

For the incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

For the carbon adsorption system, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(5) The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the vapor recovery system upstream from the ventilation header blower. This record shall be reviewed at least once per day.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(6) The permittee install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the temperature in the combustion chamber of the incinerator, as a control device for this emissions unit. The temperature monitoring device shall have an accuracy of plus or minus 1 percent of the temperature being monitored in degree Celsius, or plus or minus 0.5 degree Celsius, whichever is greater. This record shall be reviewed according to the terms and conditions for emissions unit N001 under a separate permit.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(7) The permittee shall perform quarterly, visual inspections of the vapor recovery system and control devices (incinerator and carbon adsorption system). The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.

If visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the vapor recovery system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed. Exception for delay of repair would be allowed per 40 CFR 61.350.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

(8) The permittee shall maintain records that contain the following information:

a. a record of any time when the vapor recovery system was not in operation when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;

b. any time when emissions in the vapor recovery system were not vented to either the incinerator and/or the carbon adsorption system when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action taken, if any;

c. any record indicating that the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit. The record should include the date and duration, in minutes, explanation, and corrective action, if any;

d. any time when loading occurred without submerged fill. The record should include the date and an explanation;

e. any record indicating detectable emissions from the vapor recovery system or from any equipment component of this emissions unit. This record may be included in the monthly Leak Detection and Repair Program report; and

f. any record indicating the loading and unloading activities occurred at the same time within this emissions unit. This record should include the date and an explanation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

k) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each day when the number of gallons loaded exceeded 44,000 gallons;

b. each day when the calculated loading loss value exceeded 41.9 pounds per

1,000 gallons;

c. any time when the vapor recovery system was not in operation when waste was processed within this emissions unit;

d. any time when emissions in the vapor recovery system were not vented to either the incinerator and/or the carbon adsorption system when waste was processed within this emissions unit;

e. any record indicating the pressure within the vapor recovery system upstream from the ventilation header blower was at or above atmospheric pressure when waste was processed within this emissions unit;

f. each day when loading occurred without submerged fill;

g. any record indicating detectable emissions from the vapor recovery system or from any equipment component of this emissions unit; and

h. any record indicating the loading and unloading activities occurred at the same time within this emissions unit.

The written reports shall be submitted quarterly to the Ohio EPA Northeast District Office, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

If no deviation occurred during a calendar quarter, the permittee shall submit a quarterly report which states that no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

l) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation: Organic compound emissions shall not exceed 3.5 pounds per hour.

Applicable Compliance Method: Compliance shall be assumed when the maximum loading throughput is less than 44,000 gallons per day, the calculated loading loss of the material handled each day of operation is equal to or less than 41.9 lbs/1,000 gallons, and the carbon adsorption system is demonstrated to recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

b. Emission Limitation: Organic compound emissions shall not exceed 15.1 tons per year.

Applicable Compliance Method: Compliance with the above emissions limitation is demonstrated when compliance with the hourly emissions rate is achieved.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

c. Emission Limitation: Fugitive organic compound emissions shall not exceed 33.7 tons per year.

Applicable Compliance Method: Compliance shall be assumed when the maximum loading throughput is less than 44,000 gallons per day, the calculated loading loss of the material handled each day of operation is equal to or less than 41.9 lbs/1,000 gallons, and the carbon adsorption system is demonstrated to recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

d. Emission Limitation: The incinerator, as a control device for this emissions unit, shall achieve a destruction efficiency of 99.99% for organic compounds.

Applicable Compliance Method: The incinerator is already required to achieve a destruction efficiency of 99.99% for Principle Organic Hazardous Constituents (POHCs) under a separate permit for emissions unit N001. Comprehensive Performance Testing (CPT) established that the incinerator meets the required destruction efficiency of 99.99% for POHCs, which represents the more difficult organic compounds to destroy. To remain in compliance with this requirement, the incinerator must operate within the operating parameter limits established during the CPT, or most recent testing, as stated in the terms and conditions for emissions unit N001 under separate permit.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067)

e. Emission Limitation: The carbon adsorption system shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater.

Applicable Compliance Method: Compliance shall be demonstrated by the monitoring and record keeping in section d)(4).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-20067

m) Miscellaneous Requirements

(1) None.